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US Army Corps
of Engineers
Construction Engineering
Research Laboratories

Environmental Compliance Assessment System (ECAS)

U.S. Army
Georgia Supplement

In response to the growing number of environmental laws and regulations worldwide, the U.S. Army has adopted an environmental compliance program that identifies compliance problems before they are cited as violations by the U.S. Environmental Protection Agency (USEPA).

Beginning in 1985, Major Army Commands (MACOMs) were required to conduct comprehensive environmental assessments at all installations on a 4-year cycle. The installations must also conduct a mid-cycle internal assessment. Because each MACOM was developing a separate assessment system, the Army mandated, through Army Regulation 200-1, one unified Army-wide assessment mechanism. The resulting system combines Federal, Department of Defense (DOD), and Army environmental regulations, along with good management practices and risk management information, into a series of checklists that show (1) legal requirements and (2) which specific items or operations to review. Each assessment protocol lists a point of contact to help assessors review the checklist items as effectively as possible. The Environmental Compliance Assessment System (ECAS) manual incorporates existing checklists from USEPA and private industry.

The Georgia Supplement was developed to be used in conjunction with the U.S. ECAS manual, using existing Georgia state environmental legislation and regulations as well as suggested management practices.

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FOREWORD

This work was performed for the U.S. Army Environmental Center (USAEC), under military interdepartmental purchase request number 1223, *Environmental Compliance Assessment System (ECAS)*, dated 5 August 1993. The USAEC technical monitor was Curt Williams, SFIM-AEC-ECC.

The research was performed by the Environmental Compliance Modeling and Systems Division (EC) of the Environmental Sustainment Laboratory (EL), U.S. Army Construction Engineering Research Laboratories (USACERL). The Principal Investigator was Carolyn O'Rourke, CECER-ECP. Lisa A. Gifford, CECER-ECP, was Associate Investigator. Dr. Diane K. Mann, CECER-ECP, is Acting Team Leader. Dr. John T. Bandy is Acting Chief, CECER-EC, and William D. Goran is Chief, CECER-EL.

LTC David J. Rehbein is Commander of USACERL and Dr. L. R. Shaffer is Director.

NOTICE

This manual is intended as general guidance for personnel at certain U.S. Army installations. It is not, nor is it intended to be, a complete treatise on environmental laws and regulations. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information contained herein. For any specific questions about, or interpretations of, the legal references herein, consult appropriate legal counsel.

GEORGIA SUPPLEMENT

This Georgia ECAS Supplement contains the protocols necessary for determining compliance with Georgia environmental rules and regulations. This manual is a supplement to the U.S. ECAS Manual; it does not replace it.

The following Georgia agencies have responsibility in the areas indicated:

- Department of Agriculture, Division of Entomology and Pesticides - has responsibility for the regulation of pesticide and herbicide management.

- Department of Natural Resources - handles all permits required by state and Federal environmental law, except those required by the *Coastal Marshlands Protection Act.* This includes the National Pollutant Discharge Elimination System (NPDES) permit program and pretreatment permits for effluent discharged into publicly owned treatment works.

- Department of Natural Resources Emergency Operations Center - receives reports of any spills and releases of oil and hazardous substances, telephone 800-241-4113.

- Department of Natural Resources, Environmental Protection Division - the Air Protection Branch has responsibility for air quality. The Water Management Branch and the Water Protection Branch administers the safe drinking water and water quality regulations. Groundwater protection includes a ban on any new injection wells, no discharge into groundwater, and a South Georgia groundwater monitoring program. The Land Management Branch has responsibility for solid and hazardous waste management. Biomedical regulations are administered by the Industrial Waste Unit. The Marsh and Beach Section has responsibility for coastal zone management. The Game and Fish Commission has responsibility for endangered species; and, the Historic Preservation Section has responsibility for the Georgia Register of Historic Places.

- Public Service Commission - has responsibility for the transportation of hazardous materials.

- State Fire Marshal, Hazardous Materials Division - has responsibility for storage and transportation of flammable/combustible liquids and gases.

METRIC CONVERSION TABLE

1 in.	=	25.4 mm
1 ft	=	0.305 m
1 kip	=	4448 N
1 psi	=	6.89 kPa
1 psi	=	89.300 g/cm^2
1 lb	=	0.453 kg
1 lb/ h	=	0.126 g/s
1 cu ft	=	0.028 m^3
1 mi	=	1.61 km
1 sq ft	=	0.093 m^2
1 gal	=	3.78 L
°F	=	(°C + 17.78) × 1.8
°C	=	0.55(°F-32)
1 yd	=	0.9144 m
1 Btu/ lb	=	0.556 cal/g

SECTION 1

CLEAN AIR ACT

Georgia Supplement

SECTION 1

CLEAN AIR ACT

Georgia Supplement

Georgia has adopted by reference the following Federal standards for new stationary sources (40 Code of Federal Regulations (CFR) 60.1 through 60.685):

Subpart A - General Provisions.
Subpart D - Fossil Fuel Fired Steam Generators, as amended.
Subpart Da - Electric Utility Steam Generating Units, as amended.
Subpart Db - Industrial-Commercial-Institutional Steam Generating Units, as amended.
Subpart E - Incinerators, as amended.
Subpart F - Portland Cement Plants, as amended.
Subpart G - Nitric Acid Plants, as amended.
Subpart H - Sulfuric Acid Plants, as amended.
Subpart I - Hot Mix Asphalt Facilities, as amended.
Subpart J - Petroleum Refineries, as amended.
Subpart K - Storage Vessels for Petroleum Liquids, as amended.
Subpart Ka - Storage Vessels for Petroleum Liquids, as amended.
Subpart L - Secondary Lead Smelters, as amended.
Subpart M - Secondary Brass and Bronze Ingot Production Plants, as amended.
Subpart N - Primary Emissions from Basic Oxygen Process Furnaces, as amended.
Subpart Na - Secondary Emissions from Basic Oxygen Process Steel-making Facilities, as amended.
Subpart O - Sewage Treatment Plants, as amended.
Subpart P - Primary Copper Smelters, as amended.
Subpart Q - Primary Zinc Smelters, as amended.
Subpart R - Primary Lead Smelters, as amended.
Subpart S - Primary Aluminum Reduction Plants, as amended.
Subpart T - Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants, as amended.
Subpart U - Phosphate Fertilizer Industry: Superphosphoric Acid Plants, as amended.
Subpart V - Phosphate Fertilizer Industry: Diammonium Phosphate Plants, as amended.
Subpart W - Phosphate Fertilizer Industry: Triple Superphosphate Plants, as amended.
Subpart X - Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities, as amended.
Subpart Y - Coal Preparation Plants, as amended.
Subpart Z - Ferro Alloy Production Facilities, as amended.
Subpart AA - Steel Plants: Electric Arc Furnaces, as amended.
Subpart AAa - Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels, as amended.
Subpart BB - Kraft Pulp Mills, as amended.
Subpart CC - Glass Manufacturing Plants, as amended.
Subpart DD - Grain Elevators, as amended.
Subpart EE - Surface Coating of Metal Furniture, as amended.
Subpart GG - Stationary Gas Turbines, as amended.
Subpart HH - Lime Manufacturing Plants, as amended.
Subpart KK - Lead-Acid Battery Manufacturing Plants, as amended.
Subpart LL - Metallic Mineral Processing Plants, as amended.
Subpart MM - Automobile and Light Duty Truck Surface Coating Operations, as amended.
Subpart NN - Phosphate Rock Plants, as amended.

Subpart PP - Ammonium Sulfatenufacture, as amended.
Subpart QQ - Graphic Arts Industry: Publication Rotogravure Printing, as amended.
Subpart RR - Pressure Sensitive Tape and Label Surface Coating Operations, as amended.
Subpart SS - Industrial Surface Coating: Large Appliances, as amended.
Subpart TT - Metal Coil Surface Coating, as amended.
Subpart UU - Asphalt Processing and Asphalt Roofing Manufacture, as amended.
Subpart VV - Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, as amended.
Subpart WW - Beverage Can Surface Coating Industry, as amended.
Subpart XX - Bulk Gasoline Terminals, as amended.
Subpart YY - Nitrogen Oxide Emissions from Major Sources, as amended.
Subpart ZZ - Gasoline Dispensing Facilities - Stage II, as amended.
Subpart FFF - Flexible Vinyl and Urethane Coating and Printing, as amended.
Subpart GGG - Equipment Leaks of VOC Petroleum Refineries, as amended.
Subpart HHH - Synthetic Fiber Production Facilities, as amended.
Subpart JJJ - Petroleum Drycleaners, as amended.
Subpart KKK - Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, as amended.
Subpart LLL - Onshore Natural Gas Process; Sulfur Dioxide Emissions, as amended.
Subpart OOO - Nonmetallic Mineral Processing Plants, as amended.
Subpart PPP - Wool Fiberglass Insulation Manufacturing Plants, as amended.

Georgia has adopted by reference the following Federal standards for hazardous air pollutants (40 CFR 61.01 through 61.247):

Subpart A - General Provisions, as amended.
Subpart C - Beryllium, as amended.
Subpart D - Beryllium Rocket Motor Firing, as amended.
Subpart E - Mercury, as amended.
Subpart F - Vinyl Chloride, as amended.
Subpart J - Equipment Leaks (Fugitive Emission Sources) of Benzene, as amended.
Subpart M - Asbestos, as amended.
Subpart N - Inorganic Arsenic Emissions from Glass Manufacturing Plants, as amended.
Subpart O - Inorganic Arsenic Emissions from Primary Copper Smelters, as amended.
Subpart P - Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production, as amended.
Subpart V - Equipment Leaks (Fugitive Emission Sources), as amended.

Georgia has adopted by reference the following Federal standards for prevention of significant deterioration of air quality (40 CFR 52.21 as amended):

Ambient air increments: 40 CFR 52.21(c), as amended.
Ambient air ceilings: 40 CFR 52.21(d), as amended.
Restrictions on area classifications: 40 CFR 52.21(e), as amended.
Stack heights: 40 CFR 52.21(h), as amended.
Review of major stationary sources and major modifications - source applicability and general exemptions: 40 CFR 52.21(i), as amended.
Control technology review: 40 CFR 52.21(j), as amended.
Source impact analysis: 40 CFR 52.21(k), as amended.
Air quality models: 40 CFR 52.21(l), as amended.
Air quality analysis: 40 CFR 52.21(m), as amended.
Source information: 40 CFR 52.21(n), as amended.

Additional impact analysis: 40 CFR 52.21(o), as amended.
Sources impacting Federal Class I area - additional requirements: 40 CFR 52.21(p), as amended.
Public participation: 40 CFR 52.21(q), as amended.
Source obligation: 40 CFR 52.21(r), as amended.
Innovative control technology: 40 CFR 52.21(v), as amended.
Permit rescission: 40 CFR 52.21(w), as amended.

Definitions

These definitions were obtained from the *Rules from Georgia Department of Natural Resources* (RGDNR), Chapter 391-3-1, Air Quality Control.

- *Air Cleaning Device* - any method, process, or equipment which removes, reduces, or renders less noxious air contaminants discharged into the atmosphere.

- *Air Contaminant* - solid or liquid particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any matter or substance either physical, chemical, biological, or radioactive or any combination thereof.

- *Air Pollution* - the presence in the outdoor atmosphere of one or more air contaminants.

- *Bulk Gasoline Plant* - a gasoline storage and distribution facility with an average daily throughput of more than 4000 gallons (gal) but less than 20,000 gal that receives gasoline from bulk terminals by rail and/or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

- *Bulk Gasoline Terminal* - a gasoline storage facility that receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck and has an average daily throughput of more than 20,000 gal of gasoline.

- *Capture System* - the equipment used to contain, capture, or transport a pollutant to an air cleaning device including hoods, ducts, and fans.

- *Cold Cleaning* - the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

- *Condensate* - hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

- *Conveyorized Degreasing* - the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.

- *Crude Oil* - a naturally occurring mixture that consists of hydrocarbons and/or sulfur, nitrogen, and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

- *Cutback Asphalt* - asphalt cement that has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function.

- *Department* - the Department of Natural Resources of the State of Georgia.

- *Director* - the Director of the Division of Environmental Protection, Department of Natural Resources of the State of Georgia.

- *Dust* - minute solid particles caused to be suspended in air by natural forces or by mechanical processes including, but not limited to, crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, mixing, sweeping, digging, scooping, and grading.

- *EPA* - the United States Environmental Protection Agency.

- *Emission* - any discharging of, giving off, sending forth, placing, dispensing, scattering, issuing, circulating, releasing or any other emanation of any air contaminant or contaminants into the atmosphere.

- *Emission Standard* - a requirement established which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis including any requirement relating to the equipment or operation or maintenance of a source to assure continuous emission reduction.

- *Excessive Emissions* - emissions of air pollutant in excess of an emission standard.

- *Floating Roof* - a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, that rests upon and is supported by the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank wall.

- *Fly Ash* - particulate matter capable of being gasborne or airborne and consisting essentially of fused ash or other burned or unburned materials resulting from a process of combustion of fuel or solid waste.

- *Freeboard Height* - the distance from the top of the vapor zone to the top of the degreaser tank.

- *Freeboard Ratio* - the freeboard height divided by the width of the degreaser.

- *Fuel-Burning Equipment* - equipment the primary purpose of which is the production of thermal energy from the combustion of any fuel. Such equipment that is generally used for, but not limited to, heating water, generating or superheating steam, and heating air as in warm air furnaces.

- *Fugitive Dust* - solid airborne particulate matter emitted from any source other than through a stack, vent, or chimney.

- *Gasoline Dispensing Facility* - any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

- *Incinerators* - all devices intended or used for the reduction or destruction of solid, liquid, or gaseous waste by burning.

- *Intermediate Vapor Control System* - a vapor control system that employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles.

- *Large Appliances* - doors, cases, lids, panels, and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and other similar products.

- *Large Petroleum Drycleaner* - any facility engaged in the process of the cleaning of textile and fabric products in which articles are washed in a nonaqueous solution (solvent), then dried by exposure to a heated air stream and consumes 25 tons or more of a petroleum solvent annually.

- *Malfunction* - mechanical and/or electrical failure of a process, or of air pollution control process or equipment, resulting in operation in an abnormal or unusual manner.

- *Modification* - any change in or alteration of fuels, processes, operation or equipment which affects the amount or character of any air pollutant emitted or which results in the emission of any air pollutant not previously emitted.

- *Multiple Chambered Incinerator* - any article, machine, equipment, or contrivance which is used for the reduction or destruction of solid, liquid, or gaseous waste by burning and consists of a series of three or more combustion chambers physically separated by refractory walls.

- *Opacity* - the degree to which emissions reduce the transmission of light and obscure the view of an object in the background is expressed in terms of percent opacity. As used in these regulations the measurement percent opacity does not include the measurement of the obstruction of view due to uncombined water droplets. Percent opacity is determined by the averaging of 6 minutes (min) of opacity data. With respect to the visual determination of percent opacity, the 6 min average shall be based on either an average of 24 or more opacity data points equally spaced over a 6 min period or an integrated average of continuous opacity data over a 6 min period.

- *Open-Burning* - any outdoor fire from which the products of combustion are emitted directly into the open air without passing through a stack, chimney, or duct.

- *Open Top Vapor Degreasing* - the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

- *Organic Material* - a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

- *Packaging Rotogravure Printing* - rotogravure printing upon paper, paperboard, metal foil, plastic film, and other substrates which are, in subsequent operations, formed into packaging products and labels for articles to be sold.

- *Particulate Matter* - any airborne, finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers (μm).

- *Penetrating Primecoat* - an application of low viscosity liquid asphalt to an absorbent surface. It is used to prepare untreated base for an asphalt surface.

- *Person* - any individual, corporation, partnership, association, State, municipality, political subdivision of a state, and any agency, department, or instrumentality of the United States, or any other entity, and includes any officer, agent, or employee of the above.

- *Petroleum Liquid* - crude oil, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

- *Reid Vapor Pressure* - the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases as determined by the American Society for Testing and Materials (ASTM).

- *Rotogravure Printing* - the application of words, designs, and pictures to a substrate by means of a roll printing technique that involves intaglio or recessed image areas in the form of cells.

- *Shutdown* - the cessation of the operation of a source or facility for any purpose.

- *Smoke* - small gasborne particles resulting from incomplete combustion, consisting primarily of carbon ash and other combustible materials, that form a visible plume.

- *Solvent* - organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

- *Solvent Metal Cleaning* - the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or by conveyorized degreasing.

- *Soot* - agglomerated particles consisting mainly of carbonaceous material.

- *Source* - any property, source, facility, building, structure, location, or installation at, from, or by reason of which emissions or air contaminants are or may reasonably be expected to be emitted into the atmosphere. An "indirect" source or facility is a source or facility which attracts or tends to attract activity that results in emissions of any air pollutant for which there is an ambient air standard.

- *Standard Conditions* - a temperature of 68 °F and a pressure of 760 millimeters (mm) (29.92 inches (in.)) of mercury.

- *Startup* - the commencement of operations of any source.

- *Stationary Source* - any source or facility emitting, either directly or indirectly, from a fixed location.

- *Submerged Fill Pipe* - any fill pipe with a discharge opening that is within 6 in. of the tank bottom.

- *True Vapor Pressure* - the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2597, *Evaporation Loss from Floating Roof Tanks*, 1962.

- *Vapor* - the gaseous form of a substance.

- *Vapor Collection System* - a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.

- *Vapor Control System* - a system that prevents release into the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a tank during the transfer of gasoline.

- *Visible Emissions* - any emission which is capable of being perceived visually.

- *Volatile Organic Compound (VOC)* - any organic compound which participates in atmospheric photochemical reactions.

CLEAN AIR ACT

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
All Installations	1-1 through 1-3
Ambient Air Standards	1-4
Permit Requirements	1-5
Open Burning	1-6 and 1-7
Source Monitoring	1-8 and 1-9
Incinerators	1-10 and 1-11
Fuel-Burning Equipment	1-12 and 1-13
Nitric Acid Plants	1-14
Sulfuric Acid Plants	1-15
Coating Operations	1-16 through 1-21
Cutback Asphalt	1-22
Volatile Organic Liquid Handling and Storage	1-23
Petroleum Liquid Storage	1-24 through 1-28
Petroleum Liquid Storage - Specific Counties	1-29
Solvent Metal Cleaning	1-30 through 1-32
Large Petroleum Drycleaners	1-33
Perchloroethylene Drycleaners	1-34
Graphic Arts Systems	1-35

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
1-1. Installations must take all reasonable precautions to prevent the emission of air contaminants (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(a)).	Verify that the installation does not willfully, negligently or through failure to provide necessary equipment or facilities cause, permit, or allow the emission of such quantities of air contaminants as will cause conditions injurious or which interferes with the enjoyment of life or use of property. Verify that the installation does not cause, let, or permit the emission of any air contaminant the opacity of which is equal to or greater than 40 percent. (NOTE: Specific sections of this protocol may specify more restrictive opacity standards for various air contaminants.)
1-2. Installations must meet specific emission requirements for sources of air contaminants (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(tt)).	Verify that the installation does not permit emissions of VOCs from any source to exceed 25 tons/year (yr) unless the source has been approved by the Director. (NOTE: This rule applies to all sources in the following counties only: Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale.)
1-3. Installations must take all reasonable precautions to prevent fugitive dust (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(n)).	Verify that all persons responsible for any operation, process, handling, transportation or storage facility that may result in fugitive dust take all reasonable precautions to prevent dust from becoming airborne, including, but not limited to, the following: - use, where possible, of water or chemicals for control of dust in demolition, construction operations, the grading of roads, and land clearing operations - application of asphalt, oil, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dust - use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials - adequate containment methods are employed during sandblasting or similar operations - covering, at all times when in motion, open bodied trucks, transporting materials likely to create airborne dust - the prompt removal of earth or other material from paved streets onto which earth or other materials have been deposited. Verify that the opacity from fugitive dust sources does not exceed 20 percent.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
AMBIENT AIR STANDARDS	
1-4. Installations must not create emissions that would cause ambient air concentrations of specific compounds to be exceeded (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(4)(a) through (g)).	Verify that the concentration of sulfur dioxide does not exceed the following: - at ground level for any 3 hour (h) period, 1300 micrograms (μg)/ cubic meter (m^3) more than once per year - at ground level for any 24 h period, 365 $\mu g/m^3$ more than once per year - the annual arithmetic mean concentration of 80 $\mu g/m^3$. Verify that concentrations of PM_{10} do not exceed the following limits: - for any 24 h period, 150 $\mu g/m^3$ more than once per year - the annual arithmetic mean concentration of 50 $\mu g/m^3$. Verify that concentrations of carbon monoxide do not exceed the following limits: - at ground level, 40 milligrams (mg)/m^3 for a 1 h average - at ground level, 10 mg/m^3 for an 8 h average. Verify that the concentration of ozone does not exceed 0.12 part per million (ppm) (235 $\mu g/m^3$). Verify that the concentration of lead at ground level does not exceed 1.5 $\mu g/m^3$ averaged over a calendar quarter. Verify that the annual arithmetic mean concentration of nitrogen dioxide at ground level does not exceed 100 $\mu g/m^3$.
PERMIT REQUIREMENTS	
1-5. Installations that operate a facility, and construct or modify any facility that may result in air pollution must have a permit (RGDNR, Chapter 391-3-1, Section 391-3-1 -.03(1) and (2)).	Verify that any construction or modification of facilities that may result in air pollution is done in accordance with a valid construction permit. Verify that all facilities that emit air pollutants have a valid operating permit. (NOTE: The following activities are exempt from the operating and construction permit requirements: - air conditioning or ventilation systems not designed to remove air contaminants generated by or released from such equipment - fuel burning equipment burning only gas as a fuel and having a total heat input of 50 million British thermal units (MBtu)/ h or less - fuel burning equipment having a total heat input of 10 MBtu/ h or less burning only gas and/or distillate fuel oil containing 0.50 percent sulfur by weight or less - internal combustion engines under 3000 horsepower

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-5. (continued)	- laboratory equipment used exclusively for chemical or physical analyses - small gas-fired incinerators installed in private residential dwellings of a design approved by the Director - sources of minor significance as specified by the Director - sources for which there is no applicable emission standard established - mobile sources whether or not designated as subject to mandatory inspection, maintenance, or emission requirements.)
OPEN BURNING	
1-6. Installations must not permit open burning (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(5)).	Verify that the installation does not cause, suffer, allow, or permit open burning. (NOTE: The following activities are exempt from open burning prohibitions: - burning of leaves, unless prohibited by local ordinance - recognized agricultural procedures necessary for production or harvesting of crops - destruction of combustible demolition or construction materials - burning over of any forest land by the owners of such land - recreational purposes, or cooking food - fires set for training fire-fighting personnel - disposal of tree limbs from storm damage - weed abatement, disease, and pest prevention - operation of devices using open flame such as tar kettles, blow torches, portable heaters and other flame making equipment - setting and maintenance of small fires by contractors and tradesmen necessary for such activities as street paving work, installation or repair of utilities, provided that smoke emissions do not exceed 40 percent opacity and local ordinances do not prohibit such activity - disposal of all packaging materials previously containing explosives in accordance with U.S. Department of Labor Safety Regulations.) (NOTE: During an air pollution episode declared by the proper authorities, no open burning of any kind is permitted unless required in the performance of an official duty of any public office or is necessary to thwart a hazard that cannot be properly managed by other means.)

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-7. Installations that conduct open burning for land clearing or construction or right-of-way maintenance must meet specific requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(5)(a)(11)).	Verify that when open burning in other than predominantly residential areas for land clearing or construction or right-of-way maintenance, it meets the following conditions: - prevailing winds at the time of burning are away from the major portion of the area's population - the location of the burning is at least 1000 feet (ft) from any dwelling located in a predominantly residential area - the amount of dirt on or in the material being burned is minimized - heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth are not being burned - no more than one pile 60 ft by 60 ft, or equivalent, is burned within a 9 acre area at one time - except for a reasonable period to get a fire started, no smoke of opacity greater than or equal to 40 percent is emitted.
SOURCE MONITORING	
1-8. Installations engaged in any operations that cause emissions to be released into the atmosphere that may result in air pollution must meet specific monitoring requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(6)(a)).	Verify that emission monitoring devices are installed and maintained as required by the Director for any operation that may cause emissions that result in air pollution.
1-9. Installations must meet specific reporting requirements for existing sources (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(6)(a)(vi)).	Verify that a written report is submitted to the Director for each calendar quarter for permitted equipment subject to monitoring regulations as required by the Director.
INCINERATORS	
1-10. Installations that operate incinerators must meet specific emission requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(c)).	Verify that incinerators meet the following requirements: - no particles are emitted from an incinerator that are individually large enough to be visible to the unaided eye - there are no emissions equal to or greater than 20 percent opacity - units with charging rates of 500 pounds (lb)/h or less of combustible waste, including water, do not emit fly ash or particulate grams matter in excess of 1.0 lb/h

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-10. (continued)	- units with charging rates in excess of 500 lb/ h of combustible waste, including water, do not emit fly ash or particulate matter in excess of 0.20 lb per 100 lb of charge. (NOTE: There is an allowable emission of greater than 20 percent opacity, but not in excess of 27 percent opacity, for a period of 6 min/h.)
1-11. Installations that operate incinerators must meet specific design requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(c)(4)).	Verify that the installation does not operate an incinerator unless the following requirements are met: - it is a multiple chamber incinerator - it is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800 °F - it has a secondary burner to control smoke and odors which maintains a temperature of at least 1500 °F.
FUEL-BURNING EQUIPMENT	
1-12. Installations that operate fuel-burning equipment must meet specific emission requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(d)).	Verify that emissions of fly ash and/or particulate matter and nitrogen oxides do not exceed the amounts calculated in Appendix 1-1. Verify that emissions from any fuel-burning equipment constructed or extensively modified after 1 January 1972 do not exceed 20 percent except for one 6 min period per hour of not more than 27 percent opacity.
1-13. New fuel-burning sources must meet specific emission standards for sulfur dioxide (RGDNR, Chapter 391-3-1, Section 391-3-1 -.02(2)(g)).	Verify that new fuel-burning sources capable of firing fossil fuel at a rate exceeding 250 MBtu/ h heat input, constructed or modified after 1 January 1972 do not emit sulfur dioxide in excess of the following: - 0.8 lb of sulfur dioxide per MBtu of heat input derived from liquid fossil fuel or derived from liquid fossil fuel and wood residue - 1.2 lb of sulfur dioxide per MBtu of heat input derived from solid fossil fuel or derived from solid fossil fuel and wood residue - when different fossil fuels are burned simultaneously in any combination, the standard of sulfur dioxide emissions does not exceed the limits calculated from the formula listed in Appendix 1-1. Verify that fuel-burning sources below 100 MBtu of heat input per hour do not burn fuel containing more than 2.5 percent sulfur by weight. Verify that fuel-burning sources having a heat input of 100 MBtu or greater do not burn fuel containing more than 3 percent sulfur by weight.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
NITRIC ACID PLANTS	
1-14. Installations that operate nitric acid plants must meet specific standards for emissions of nitrogen oxides (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(i)).	Verify that nitric acid plants are not operated unless equipped with a continuous nitrogen oxide monitor and recorder, or an alternate system approved by the Director. Verify that for nitric acid plants constructed before 1 January 1972, nitrogen oxide emissions expressed as nitrogen dioxide do not exceed 25 lb/ton of 100 percent acid produced. Verify that new nitric acid plants do not exceed nitrogen oxide standards listed in 40 CFR 60, Subpart G.
SULFURIC ACID PLANTS	
1-15. Installations that operate sulfuric acid plants must meet specific standards for emissions of sulfur dioxide (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(j)).	Verify that sulfuric acid plants constructed before 1 January 1972 do not emit sulfur dioxide in excess of 27 lb and acid mist in excess of 0.15 lb/ton of 100 percent acid produced. Verify that new sulfuric acid plants do not exceed sulfur dioxide standards listed in 40 CFR 60, Subpart G.
COATING OPERATIONS	(NOTE: These regulations do not apply to installations or facilities located outside Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale counties where the potential emissions of volatile organic compounds are not more than 100 tons/yr, or less than 15 lb/day and less than 3 lb/h.) (NOTE: The emission limits in this section may be achieved through the use of low solvent content coating technology or through incineration, with a capture system approved by the Director that reduces emissions by 90 percent, or by control equipment that is demonstrated to have an equivalent control efficiency.)
1-16. Installations that conduct paper coating operations must meet specific VOC emission standards (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(w)).	Verify that the emission of VOCs from paper coating operations do not exceed 2.9 lb/gal, excluding water.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	REVIEWER CHECKS:
1-17. Installations that conduct metal furniture coating operations must meet specific VOC emission standards (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(y)).	Verify that the emission of VOCs do not exceed 3.0 lb/gal, excluding water, from any metal furniture coating operations.
1-18. Installations that conduct fabric and vinyl coating operations must meet specific VOC emission standards (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(x)).	Verify that the emission of VOCs from fabric or vinyl coating operations does not exceed the following: - 2.9 lb/gal, excluding water, delivered to the coating from fabric coating lines - 3.8 lb/gal, excluding water, delivered to the coating from vinyl coating lines.
1-19. Installations that conduct large appliance surface coating operations must meet specific emission standards for VOCs (RGDNR, Chapter 391-3-1, Section 391-3-1-.02 (2)(z)).	Verify that emission of VOCs in large appliance surface coating operations does not exceed 2.8 lb/gal, excluding water, delivered to the coating applicator from prime, single or topcoat operations. (NOTE: This regulation does not apply to the use of quick drying lacquers used for repair of scratches and nicks.)
1-20. Installations that conduct surface coating operations of miscellaneous metal parts must meet specific VOC emission standards (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(ii)).	(NOTE: The following are not included in the definition of miscellaneous metal parts: automobiles and light duty trucks, metal cans, flat metal sheets and strips in the form of roll or coils, magnet wire, metal furniture, large appliances, exterior of airplanes, automobile refinishing, exterior of marine vessels.) Verify that emissions of VOCs from surface coating of miscellaneous metal parts do not exceed the following: - 4.3 lb/gal of coating, excluding water, in the application of clear coatings - 3.5 lb/gal of coating, excluding water, in the application of air dried, or forced warm air dried coatings at temperatures up to 194 °F - 3.5 lb/gal of coating, excluding water, in the application of extreme performance coatings - 6.2 lb/gal, excluding water, in the application of high performance architectural coatings - 3.0 lb/gal, excluding water, in the application of all other coatings. (NOTE: If more than one emission limitation applies to a coating operation, the least stringent emission limitation will apply.) (NOTE: Solvent washings are considered in the above emission limitations, unless the solvent is directed into containers that prevent evaporation.)

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	REVIEWER CHECKS:
21. Installations that conduct surface coating operations of flat wood paneling must meet specific VOC emission requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(jj)).	Verify that VOC emissions from surface coating of flat wood paneling does not exceed the following: - 6.0 lb per 1000 ft^2 of finished product from printed interior panels - 12.0 lb per 1000 ft^2 of finished product from natural finish hardwood plywood panels.
CUTBACK ASPHALT	
1-22. Installations must not use cutback asphalt for paving operations (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(dd)).	Verify that the installation does not permit the use of cutback asphalt for paving purposes except as necessary for the following: - long-life stockpile storage - the use or application at ambient temperatures less than 50 °F - solely as a penetrating primecoat - base stabilization.
VOLATILE ORGANIC LIQUID HANDLING AND STORAGE	
1-23. Installations that handle or store any volatile organic liquid in tanks greater than 4000 gal in capacity must meet specific requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(vv)).	Verify that the transfer of any volatile organic liquid other than gasoline from a delivery vessel into a stationary storage tank of greater than 4000 gal is conducted only if the tank is equipped with submerged fill pipes.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

PETROLEUM LIQUID STORAGE
 	
1-24. Installations that have petroleum liquid storage vessels of 40,000 gal or more must meet specific design requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(bb) and (nn)).
	(NOTE: This rule does not apply to underground storage tanks, if the total volume of petroleum liquids added to and taken from the tank annually does not exceed twice the volume of the tank.)
	
	Verify that the installation does not utilize a fixed roof storage vessel for the storage of volatile petroleum liquid where the true vapor pressure is greater than 1.52 psia and the capacity is 40,000 gal or more, unless one of the following requirements are met:
	
	- the vessel has been fitted with a floating roof
	- the vessel has been fitted with control equipment approved by the Director.
	
	Verify that storage tanks for petroleum liquids in capacities greater than 40,000 gal that have external floating roofs meet one of the following design requirements:
	
	- the vessel is fitted with a continuous secondary seal extending from the floating roof to the tank wall
	- the vessel is fitted with a closure device that controls VOC emissions with an effectiveness equal to or greater than a secondary seal.
	
	Verify that all seal closure devices on storage tanks for petroleum liquids in capacities greater than 40,000 gal that have external floating roofs meet the following requirements:
	
	- there are no visible holes, tears, or other openings in the seal or seal fabric
	- the seals are intact and uniformly in place around the circumference of the floating roof and the tank wall
	- vapor mounted primary seals, the accumulated area of gaps exceeding 1/8 in. does not exceed 1.0 $in.^2/ft$) of tank diameter
	- all openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves are:
	  - equipped with covers or seals or lids kept in the closed position at all times except when in use
	  - equipped with projections into the tank that remain below the liquid surface at all times
	- automatic bleeder vents are kept closed at all times except when the roof is floated off or landed on the roof leg supports
	- rim vents are set to open when the roof is being floated off leg supports or at the manufacturer's recommended setting
	- emergency roof drains are provided with slotted membrane fabric covers or equivalent covers that cover at least 90 percent of the area of the opening.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

1-25. Installations that store petroleum liquids in external floating roof storage tanks with capacities greater than 40,000 gal must meet specific inspection and record-keeping requirements (RGDNR, Chapter 391-3-1, Section 391-3-1 -.02(2)(nn)(2)).	(NOTE: This rule does not apply to the following:
	- vessels used to store waxy, heavy pour crude oil
	- vessels having a capacity of less than 420,000 gal and are used to store produced crude oil and condensate prior to lease custody transfer
	- vessels containing a petroleum liquid with a true vapor pressure of less than 1.5 psia
	- vessels containing a petroleum liquid with a true vapor pressure of less than 4.0 psia and have the following:
	  - are of welded construction
	  - have a metallic type shoe seal, a liquid mounted foam seal, a liquid mounted liquid filled type seal, or similar device.)
	
	Verify that the following inspection requirements are met:
	
	- semi-annual inspections of the secondary seal system
	- annual measurement of the secondary seal gap when the floating roof is equipped with a vapor-mounted primary seal.
	
	Verify that records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of inspections are maintained for a minimum of 2 yr.

1-26. Installations that operate bulk gasoline plants must meet specific design and operational requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(pp)).	(NOTE: This rule does not apply to stationary storage tanks of less than 2000 gal.)
	
	Verify that the installation does not permit the receiving or dispensing of gasoline from a stationary storage tank, unless the following requirements are met:
	
	- each tank is equipped with a submerged fill pipe approved by the Director
	- each tank is equipped with a fill line with the discharge opening at the tank bottom
	- each tank has a vapor balance system consisting of the following major components:
	  - a vapor space connection on the stationary storage tank equipped with vapor-tight fittings that automatically and immediately close upon disconnection to prevent escape of gasoline and gasoline vapor
	  - a connecting pipe or hose equipped with vapor-tight fittings that automatically and immediately close upon disconnection.
	
	Verify that the installation does not permit the transfer of gasoline between the stationary tank and a truck or trailer, unless the following requirements are met:
	
	- the vapor balance system is connected, operating, and in good working order
	- the gasoline transport vehicle is maintained to prevent the escape of fugitive vapors and gases during loading operations

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-26. (continued)	- means are provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected - the pressure relief valves on storage vessels and tank trucks or trailers are set to release at 0.7 psia or greater, unless restricted by State or local fire codes in which case the valve is set to release at the highest possible pressure allowed.

1-27. Installations must meet specific design and operational requirements for the loading and unloading of gasoline from bulk gasoline terminals (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(cc)).	Verify that no person loads gasoline into any tank trucks or trailers from a bulk gasoline terminal, unless the following requirements are met:
	- the terminal is equipped with vapor control equipment properly installed and in good working order that does not allow the emission of VOC in excess of 4.7 grains/gal of gasoline, and consists of one of the following:
	  - an adsorber or condensation equipment which processes and recovers at least 90 percent of all vapors and gases from the equipment being controlled
	  - vapor collection equipment that directs all vapors to a fuel gas system
	  - control equipment demonstrated to have an equivalent efficiency that is approved by the Director.
	- all displaced vapors and gases are vented only to the vapor control equipment
	- complete drainage of any loading arm is accomplished before it is removed from the tank
	- all vapor loading lines are equipped with fittings that make vapor-tight connections and that close automatically when disconnected, or a loading arm with vapor return line and hatch seal designed to prevent the escape of gases and vapor while loading.

1-28. Installations that operate gasoline dispensing facilities must meet specific design requirements (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(rr)).	Verify that the installation does not permit the transfer of gasoline from any delivery vessel to any stationary storage tank, unless the following requirements are met: - there is a vapor-tight line from the storage tank to the delivery vessel and a system that will ensure the vapor line is connected before gasoline can be transferred into the tank - a refrigeration-condensation system or a carbon adsorption system is utilized and recovers at least 90 percent by weight of the organic compounds in the displaced vapor.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
PETROLEUM LIQUID STORAGE - SPECIFIC COUNTIES **1-29.** Installations that operate gasoline transport vehicles must meet specific design and operational requirements for loading and unloading gasoline (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(ss)).	(NOTE: This rule applies to facilities located in the following counties: Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale.) Verify that the installation does not permit the loading or unloading of gasoline from any transport vehicle, unless the following requirements are met: - the tank sustains a pressure change of not more than 3 in. of water in 5 minutes (min) when pressurized to 18 in. of water and evacuated to 6 in. of water - the vehicle displays a marking on the right front side of the tank, in characters at least 2 in. high, that reads P/V TEST DATE, and the date on which the tank was last tested - the tank has no visible liquid leaks and no gasoline vapor leaks as measured by a combustible gas detector - the vehicle is equipped with vapor-tight fittings that automatically and immediately close upon disconnection with a vapor return line and hatch seal. Verify that all vapor collection and control systems are designed and operated in a manner that prevents the following: - gauge pressure from exceeding 18 in. of water and vacuum pressure from exceeding 6 in. of water in the gasoline tank truck - a reading equal to or greater than 100 percent of the lower explosive limit at 1 in. from all points on the perimeter of a potential leak source during loading or unloading operations - avoidable visible liquid leaks during loading and unloading operations. Verify that a transport vehicle or vapor collection and control system for which the Division has required a pressure/vacuum retest or leak check meets the following requirements: - loading and unloading operations are ceased 14 days of the date of the initial retest or leak check - provide written notification to the Division of the scheduled time and place of the test - supply a copy of all test results to the Division.

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SOLVENT METAL CLEANING	

1-30. Installations that operate cold cleaner degreasers must meet specific requirements for the control of VOC emissions (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(ff)(1)).	Verify that the following requirements are met:
	- the degreaser is equipped with a cover to prevent the escape of VOC during periods of nonuse
	- the degreaser is equipped with a facility for draining cleaned parts before removal
	- if used, the solvent spray is a solid fluid stream (not a fine atomized mist) at a pressure that does not cause excessive splashing
	- if the solvent volatility is 0.60 psi or greater measured at 100 °F, or if the solvent is heated above 120 °F, then one of the following control devices is used:
	  - freeboard of a ratio of 0.7 or greater
	  - water cover of the solvent (the solvent must be heavier than water)
	  - other systems of equivalent control, such as a refrigerated chiller or carbon adsorption
	- waste solvent is stored only in covered containers and is not disposed of in such a manner that will allow excessive evaporation.

1-31. Installations that operate open top degreasers must meet specific requirements for the control of VOC emissions (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(ff)(2)).	Verify that open top degreasers meet the following requirements for VOC emission control:
	- the degreaser is equipped with a cover to prevent escape of VOC during periods of nonuse
	- the degreaser is equipped with one of the following control devices:
	  - freeboard of a ratio greater than or equal to 0.75
	  - a refrigerated chiller
	  - enclosed design (cover or doors open only when dry parts enter or exit the degreaser)
	  - carbon adsorption system exhausting less than 25 ppm solvent averaged over one complete adsorption cycle
	  - a control system with control efficiency equivalent or better than the above systems
	- operating procedures, including the following, are displayed on the degreaser:
	  - the cover is closed at all times except when processing work loads
	  - minimize solvent carry out by the following measures:
	  - rack parts are used to allow full drainage
	  - the work load is degreased in the vapor zone for at least 30 seconds (s) or until condensation ceases
	  - pools of solvent are tipped out prior to removal of parts
	  - parts are allowed to dry within the degreaser for at least 15 s or until visually dry
	- porous materials, such as wood, cloth, or leather are not degreased
	- work loads do not occupy more than one-half of the degreaser's open top area

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-31. (continued)	- the vapor level does not drop more than 4 in. when the work load enters the vapor zone - spraying is not done above the vapor zone - solvent leaks are repaired immediately, or the degreaser is shut-down - ventilation fans are not used near the degreaser - water is not visually detectable in the solvent exiting the water separator.

1-32. Installations that operate conveyorized degreasers must meet specific requirements for the control of VOC emissions (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(ff)(3)).	Verify that the following VOC emission control requirements are met for conveyorized degreasers:
	- the degreaser is equipped with a cover to prevent the escape of VOC during periods of nonuse
	- the degreaser is equipped with either a drying tunnel, or other means such as a rotating basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor
	- the degreaser is equipped with one of the following:
	  - a refrigerated chiller
	  - a carbon adsorption system that exhausts less than 25 ppm of solvent by volume averaged over a complete cycle
	  - a control system demonstrated to have control efficiency equivalent to or better than the above systems
	- exhaust ventilation does not exceed 65 $ft^3/min/ ft^2$ of degreaser opening, unless necessary to meet OSHA requirements
	- workplace fans are not used near the degreaser
	- parts are racked for best drainage
	- vertical conveyor speed is less than 11 ft/min
	- solvent leaks are repaired immediately or the degreaser is shut-down
	- water is not visually detectable in the solvent exiting the water separator
	- down-time cover is placed over entrances and exits of the degreaser immediately after the conveyor and exhaust are shut-down and removed just before they are started up
	- waste solvent is stored only in covered containers and is not disposed of in a manner that will allow excessive evaporation.

LARGE PETROLEUM DRYCLEANERS	
1-33. Installations that operate large petroleum drycleaning facilities must meet specific design and operational requirements for VOC emissions (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(qq)).	Verify that large drycleaning facilities meet the following requirements: - emissions of VOC do not exceed 3.5 lb per 100 lb dry weight of articles drycleaned - the VOC content of all filtration waste is reduced to 1 lb or less per 100 lb dry weight of articles cleaned before disposal and exposure to the atmosphere - a cartridge filtration system is installed - filter cartridges are drained in the sealed housing for 8 or more hours before their removal

COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
1-33. (continued)	- equipment is inspected for leaks every 15 days - all petroleum vapor and liquid leaks are repaired within 3 days of discovery - inspection and repair records are maintained for a period of at least 2 yr.
PERCHLORO-ETHYLENE DRYCLEANERS	
1-34. Installations that operate perchloroethylene drycleaning facilities that consume more than 3 lb/h or 15 lb/day of perchloroethylene must meet specific design and operations requirements (RGDNR, Chapter 391-3-1, Section 391-3-1 -.02(2)(ww)).	(NOTE: This rule applies to installations located in the following counties only: Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale.) Verify that perchloroethylene drycleaning facilities meet the following requirements: - the dryer exhaust is vented through a properly functioning carbon adsorption system or equally effective device - the dryer control device emits no more than 100 ppm of VOC before dilution - all components found to be leaking liquid VOC are repaired immediately - all diatomaceous earth filters are cooked or treated so that the residue contains 25 percent or less of VOC per 100 lb of wet waste material - the VOC from all solvent stills is reduced to 60 lb or less per 100 lb of wet waste material - all filtration cartridges are drained in the filter housing for at least 24 h before discarding - when possible, all drained cartridges are dried without emitting VOC to the atmosphere.
GRAPHIC ARTS SYSTEMS	
1-35. Installations that operate graphic arts systems must meet specific requirements for VOC emissions (RGDNR, Chapter 391-3-1, Section 391-3-1-.02(2)(mm)).	Determine if the installation operates a packaging rotogravure, publication rotogravure, or flexographic printing facility employing solvent containing ink. Verify that graphic arts facilities meet the following requirements: - the volatile fraction of the ink, as it is applied to the substrate, contains 25 percent by volume or less of organic solvent and 75 percent by volume or more of nonvolatile material or nonorganic solvent - the ink as it is applied to the substrate, less water, contains 60 percent by volume or more nonvolatile material - the installation operates VOC emission reduction equipment approved by the Director that has 90 percent reduction efficiency.

Appendix 1 - 1

Emission Standards For Fuel Burning Equipment, Nitrogen Oxides, And Sulfur Dioxide

(Source: GAQC, Chapter 391-3-1, Section 391-3-1-.02(2)(d))

Emission Standards for Fuel Burning Equipment

P = allowable weight of emissions of fly ash and/or other particulate matter in pounds per MBtu heat input.
R = heat input of fuel-burning equipment in MBtu/h.

For equipment constructed before 1 January 1972, emissions of fly ash and/or other particulate matter must not be equal to or exceed the following:

For equipment less than 10 MBtu heat input per hour:

$P = 0.7$ pounds (lb)/MBtu heat input

For equipment equal to or greater than 10 MBtu heat input per hour, or equal to or less than 2000 MBtu/h:

$P = 0.7\ [10/R]^{0.202}$ lb/MBtu heat input

For equipment larger than 2000 MBtu heat input per hour:

$P = 0.24$ lb/MBtu heat input

Equipment constructed after 1 January 1972:

Equipment less than 10 MBtu heat input per hour:

$P = 0.5$ lb/MBtu heat input

For equipment equal to or greater than 10 MBtu heat input per hour, or equal to or less than 250 MBtu/h:

$P = 0.5\ [10/R]^{0.5}$ lb/MBtu heat input

For equipment greater than 250 MBtu heat input per hour:

$P = 0.10$ lb/MBtu heat input.

Emission Standards for Nitrogen Oxides

x = percent of total heat input derived from gaseous fuel
y = percent of total heat input derived from oil
z = percent of total heat input derived from coal

For fuel burning equipment equal to or greater than 250 MBtu/h of heat input constructed or modified after 1 January 1972 nitrogen oxide emissions expressed as nitrogen dioxide must not exceed the following:

when firing coal, 0.7 lb of NO_x per MBtu heat input
when firing oil, 0.3 lb of NO_x per MBtu heat input
when firing gas, 0.2 lb of NO_x per MBtu heat input
when different fuels are burned simultaneously, the standard is determined by the following formula:

$$\frac{x(0.20) + y(0.30) + z(0.70)}{x + y + z}$$

Emission Standards for Sulfur Dioxide

y = percent of total heat input derived from liquid fossil fuel
z = percent of total heat input derived from solid fossil fuel
a = the allowable emission in pounds per MBtu .

When different fossil fuels are burned simultaneously sulfur dioxide emissions standards are determined by the following formula:

$$a = \frac{y(0.80) + z(1.2)}{y + z}$$

INSTALLATION:	COMPLIANCE CATEGORY: CLEAN AIR ACT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 2

CLEAN WATER ACT

Georgia Supplement

SECTION 2

CLEAN WATER ACT

Georgia Supplement

Definitions

These definitions were obtained from the *Rules of Georgia Department of Natural Resources* (RGDNR), Chapters 391-2-2, 391-3-6 and 391-3-7.

- *Act* - the *Georgia Water Quality Control Act.*

- *Annual Average Withdrawal* - the total yearly amount of water pumped by a water source or water system divided by the number of days in that year. The amount is expressed in gallons per day.

- *Aquaculture Project* - any point source that meets the criteria in 40 CFR 122.25.

- *Aquifer* - a geological formation, group of formations, or part of a formation that is capable of yielding water to a well or spring.

- *Area of Review* - the area surrounding an injection well or field where migration of the injection and/or formation fluid into an underground source of drinking water may occur.

- *Area Within the Act's Jurisdiction* -
  1. the dynamic dune fields on the barrier islands of the state
  2. the submerged shoreline lands of the state from the seaward limit of the state's jurisdiction landward to the dynamic dune fields or to a line projected from the westernmost point of the dynamic dune field on the southern end or northern end of a barrier island, to the westernmost point of the dynamic dune field on the northern end of the adjacent barrier island to the south, or on the southern end of the adjacent barrier island to the north.

- *Blender* - any mechanical device capable of reducing sewage solids into a finely divided state such that a liquid disinfecting agent may be effectively dispersed throughout the blended sewage.

- *Board* - the Board of Natural Resources of the State of Georgia.

- *Boat* - any vessel or watercraft whether moved by oars, paddles, sails, or other power mechanism, inboard or outboard, or any other vessel or structure floating upon the waters of this state whether or not capable of self locomotion, including, but not limited to, cabin cruisers, houseboats, barges and similar floating objects.

- *Buffer* - a vegetated area along the course of any state waters to be maintained in an undisturbed and natural condition.

- *Casing* - a pipe or tubing of appropriate material of varying diameter and weight, lowered into a borehole during or after drilling in order to support the sides of the hole and thus prevent the walls from caving, or prevent loss of drilling mud into porous ground or to prevent water, gas, or other fluids from entering or leaving the hole.

- *Concentrated Animal Feeding Operation* - any point source that meets the criteria in 40 CFR 122 23.

- *Concentrated Aquatic Animal Production Facility* - any point source that meets the criteria in 40 CFR 122.24.

- *Confining Bed* - a body of impermeable or distinctly less permeable material stratigraphically adjacent to one or more aquifers.

- *Consistently Exceeding an Effluent Limitation* - a publicly owned treatment works (POTW) that exceeds the 30 day average limit for biochemical oxygen demand or total suspended solids for at least 5 days out of each 7 day period during a total period of 180 consecutive days.

- *Construction* - any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

- *Consumptive Use* - any use of water withdrawn from the ground other than "nonconsumptive use."

- *Contaminant* - any physical, chemical, biological, or radiological substance or matter in water.

- *Department* - the Department of Natural Resources of the State of Georgia.

- *Design Pumping Capacity* - the actual rate that a well pump will produce water at the time the well pump was installed. This rate will vary with the horsepower of the pump motor, total dynamic head, and size of the discharge pipe.

- *Director* - the Director of the Environmental Protection Division of the Department of Natural Resources, State of Georgia.

- *District* - the appropriate Soil and Water Conservation District.

- *Diversion* - a turning aside or altering of the natural course of surface water.

- *Division* - the Environmental Protection Division of the Department of Natural Resources, State of Georgia.

- *Domestic and Personal Uses* - uses for drinking, cooking, washing, sanitary purposes, and all health related activities.

- *Effluent Limitation* - any restriction or prohibition established under the Act on quantities, rates, or concentrations, or a combination thereof, of chemical, physical, or other constituents which are discharged from point sources into the waters of the state, including, but not limited to, schedules of compliance and whole effluent biological monitoring requirements.

- *EPA* - the United States Environmental Protection Agency.

- *Environmental Information Document* - an assessment of environmental impact of any proposed construction, upgrading or expansion of a wastewater treatment facility. This evaluation may include, but is not limited to, the impact of the proposed construction, upgrading or expansion on air quality, flood plains, wetlands, noise pollution, water quality, cultural resources, and endangered or threatened species.

- *Erosion* - the process by which land surface is worn away by the action of wind, water, ice, or gravity.

- *Estuarine Area* - all tidally-influenced waters, marshes and marshlands lying within a tide-elevation range from 5.6 feet (ft) above mean tide level and below.

- *Existing Instream Water Uses* - water uses actually attained in the water body on or after 28 November 1975.

- *Farm Uses* - irrigation of any land used for general farming, forage, aquaculture, pasture, turf production, orchards, or tree and ornamental nurseries; provisions of water supply for farm animals, poultry farming, or any other activity conducted in the course of farming operations. Farm uses also include the processing of perishable agricultural products and the irrigation of recreational turf. Irrigation of recreational turf from the surface waters of the Chattahoochee River watershed upstream from the Peachtree Creek confluence is not considered farm use. Irrigation of recreational turf from groundwaters in Chatham, Effingham, Bryan, and Glynn counties is not considered a farm use.

- *Federal Act* - the Federal *Water Pollution Control Act* (*Clean Water Act*) amended as of 1972.

- *Fluid* - any material or substance that flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state.

- *Formation* - a body of consolidated or unconsolidated rock characterized by a degree of lithologic homogeneity that is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface.

- *Formation Fluid* - fluid present in a formation under natural conditions as opposed to introduced fluids, such as drilling mud.

- *General Permit* - an National Pollutant Discharge Elimination System (NPDES) permit issued under 40 CFR 122.28.

- *Groundwater* - water below the land surface in the zone of saturation.

- *Grout* - a mixture of not more than 6 gal of clear water to one 95-pound (lb) bag of portland cement. The mixture may contain additives in proper amounts as necessary to reduce shrinkage and increase compatibility of the grout to injection and formation fluids

- *Impoundment* - the storing or retaining of surface water by whatever method or means.

- *Indirect Discharger* - a nondomestic discharger introducing pollutants to a publicly owned treatment works.

- *Industrial User* - any that discharges or proposes to discharge any pollutant into a publicly owned treatment works and then into waters of the state.

- *Injection* - the subsurface emplacement of fluids.

- *Injection Well* - a well into which fluids are being, or intended to be, injected, with the following classes:
  1. Class I Wells - industrial and municipal disposal wells that inject fluids other than hazardous waste or radioactive waste below the lowermost formation containing, within 2 miles (mi) of the well bore (or greater if determined by the Director), an underground source of drinking water

2. Class II Wells - wells that inject fluids that are brought to the surface in connection with oil or natural gas production, enhanced recovery of oil or natural gas, or for storage of hydrocarbons that are liquid at standard temperature and pressure
3. Class III Wells - wells that inject fluids for the extraction of minerals
4. Class IV Wells - injection wells or septic tank wells or cesspools used by hazardous or radioactive waste generators, management facilities, or disposal sites to dispose of hazardous or radioactive wastes into the subsurface or groundwater
5. Class V Wells consist of all injection wells not included in Classes I, II, III, or IV and include but are not limited to:
   a. air conditioning return flow wells used to return to the aquifer the water used for heating or cooling in a heat pump
   b. cesspools including multiple dwelling, community, or regional cesspools, or other devices that receive wastes that have an open bottom and sometimes have perforated sides
   c. cooling water return flow wells used to inject water previously used for cooling
   d. drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation
   e. recharge wells used to replenish the water in an aquifer
   f. salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water
   g. sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined out-portions of subsurface mines whether the injected is a radioactive waste or not
   h. septic system wells used to inject the waste or effluent from a multiple dwelling business establishment, community or regional business establishment septic tank. Class V does not include the following
      1. individual or single family residential waste disposal systems such as domestic cesspools or septic systems
      2. nonresidential cesspools, septic systems, or similar waste disposal systems if such systems are used solely for the disposal of sanitary waste and have the capacity to serve fewer than 20 persons a day
   i. subsidence control wells not used for the purpose of oil or natural gas product but to inject fluids into a nonoil or gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water
   j. wells associated with the recovery of geothermal energy
   k. wells used for in situ recovery of lignite, coal, tar sands, and oil shale
   l. dry wells used for injection of wastes into a subsurface formation other than Class I or Class IV wells.

- *Injection Zone* - a geological formation, group of formations, or part of a formation receiving fluids through a well.

- *Instream Flow* - that minimum continuous flow reserved to the surface waters of the state at or immediately downstream of the point of withdrawal, diversion or impoundment.

- *Interference or Interfere* - inhibition or disruption of a publicly owned treatment work's sewer system, treatment processes or operations which causes or significantly contributes to a violation of any NPDES permit requirement. This includes prevention of sewage sludge use or disposal in accordance with Section 405 of the Federal Act, or any criteria, guidelines, or regulations developed pursuant to state or Federal water, land or air protection laws.

- *Land Disposal System* - any method of disposing of pollutants when the pollutants are applied to the surface or beneath the land surface and pollutants percolate, infiltrate, or are absorbed into the soil and then into the waters of the state. Land disposal systems exclude landfills, sanitary landfills, and septic tank systems that are approved by the appropriate County Boards of Public Health but include ponds, basins, or lagoons used for disposal of wastes or wastewaters, where evaporation and/or percolation are used to prevent point discharge of pollutants into waters of the state.

- *Land Disposal System Permit* - any permit issued by the Division to regulate the discharge of any pollutant into a land disposal or land treatment system.

- *Land Disturbing Activity* - any activity that may result in soil erosion and the movement of sediments into state waters or onto lands within the state, including but not limited to clearing, dredging, grading, excavating, transporting, and filling of land, but not including agricultural practices described in the Official Code of Georgia Annotated (O.C.G.A.) 12-7-17-(5).

- *Land Treatment System* - any land disposal system in which vegetation on the site is used to remove some of the pollutants applied.

- *Major Spill* -
  1 the discharge of pollutants into the waters of the state by a publically owned treatment works that exceeds the weekly average permitted effluent limit for biochemical oxygen demand (5-day) or total suspended solids by 50 percent or greater for any 1 day
  2. any discharge of raw sewage that is excess of 10,000 gal or results in water quality violations in the waters of the state.

- *Marine Sanitation Device* - any equipment for installation on a boat which is designed to receive retain, treat, or discharge sewage or any process to treat such sewage.

- *Marine Toilet* - any toilet on or within a boat.

- *Maximum Day Withdrawal* - the highest total amount of water pumped by a water source or water system in a 24-hour (h) period. The amount is expressed in gal/day.

- *Monthly Average Withdrawal* - the total amount of water pumped by a water source or water system in any 1 month (mo) of the same year in which the "annual average withdrawal" is measured, divided by the number of days in that month. The amount is expressed in gallons per day.

- *National Pollutant Discharge Elimination System (NPDES)* - the national system for the issuance of permits.

- *NPDES Permit* - the permit issued by the Division to regulate the discharge of pollutants from any point source into the waters of the state.

- *New Discharger* - any point source that meets the criteria in 40 CFR 122.29.

- *New Source* - any point source that meets the criteria in 40 CFR 122.29.

- *Nonconsumptive Use* - the use of water withdrawn from the groundwater system or aquifer in such a manner that it is returned to the groundwater system or aquifer from which it was withdrawn without substantial diminution in quantity or substantial impairment in quality at or near the point from which it was withdrawn.

- *One Hundred Year Flood Plain* - the land in the flood plain subject to a 1 percent or greater statistical occurrence probability of flooding in any given year.

- *Other Disposal Unit* - any device on or within any boat other than marine toilet, which is intended for use in the disposal of human body wastes or sewage.

- *Plugging* - the act or process of stopping the flow of all fluids, including water, oil or gas into or out of a formation through a borehole or well penetrating that formation.

- *Pretreatment Permit* - any permit issued by the Division to regulate the discharge of pollutants from any significant source into a publicly owned treatment works and the waters of the state.

- *Professional Engineer* - a person registered to practice professional engineering in accordance with the provisions of an Act Governing the Practice of Professional Engineering in Georgia.

- *Public Participation* - providing information to the public potentially affected by the proposed project and providing the public input prior to construction.

- *Pumping Level* - the distance, in feet, from the land surface or other permanent specified datum, preferably the top of the casing to the water surface (water level) in the well when the water is being pumped from the well.

- *Regional Administrator* - the Regional Administrator for the EPA region which includes the State of Georgia.

- *Roadway Drainage Structure* - bridges, culverts, piping, and ditches associated with roadway construction, which allow stream flows to move freely under a stream crossing or which convey stormwater runoff from a roadway to a stream.

- *Separate Storm Sewer* - any point source that meets the criteria in 40 CFR 122.26.

- *Sewage* - water carried wastes generated by human beings or their activities.

- *Sewerage System* - any system for the treatment or disposal of pollutants, including treatment works, pipelines or conduits, pumping stations and force mains, and all other constructions, devices, and appliances appurtenant thereto, used for conducting pollutants to the point of ultimate disposal.

- *Significant Source* -
  1. an industrial user subject to any national pretreatment standard
  2. an industrial user that has in its waste a toxic pollutant in toxic amounts as defined by Federal standards
  3. an industrial user that significantly interferes with, either singly or in combination with other contributing industries, the treatment works or the quality of the effluent.

- *Silvicultural Point Source* - any point source that meets the criteria in 40 CFR 122.27.

- *Stormwater Point Source* - a conveyance or system of conveyances (including pipes, conduits, ditches, and channels) primarily used for collecting and conveying storm water runoff and which meets any of the following criteria:
  1. are located at an urbanized area as designated by the Bureau of the Census
  2. discharges from lands or facilities used for industrial or commercial activities
  3. are designated by the Director.

- *Specific Conductance* - the water's capacity to convey an electric current and is related to the total concentration of the ionized substances in the water and the temperature at which the measurement is made and is generally reported as micrombos/cm or microSiemens/cm.

- *Static Water Level* - the distance, in feet, from the land surface or other permanent specified datum, preferably the top of the casing, to the water level in a well or to the pressure head (shut-in head) after the flow is shut off from a flowing well, when no water is being pumped from the well and the water level has reached equilibrium.

- *Surface Waters of the State* - see Waters of the State.

- *Treatment Requirement* - any restriction or prohibition established under the Act on quantities, rates, or concentrations, or a combination thereof, of chemical, physical, biological, or other constituents that are discharged into a land disposal or land treatment system and then into the waters of the state, including but not limited to schedules of compliance.

- *Underground Source of Drinking Water* - all aquifers or portions of aquifers that are not exempted aquifers.

- *Wastewater Treatment Facilities* - any device or system (including recycling and reclamation) used in the treatment of sewage or other waterborne waste or pollutants.

- *Watercourse* - any natural or artificial waterway, stream, river, creek, channel, ditch, canal, conduit, culvert, drain, gully, ravine, or wash in which water flows either continuously or intermittently, having a definite channel, bed and bank, and includes any area adjacent thereto which is subject to inundation by reason of overflow or floodwater.

- *Waters of the State* - any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs producing in excess of 100,000 gal/day, and all other bodies of surface water, natural or artificial, lying within or forming a part of the boundaries of the state which are not entirely confined and retained completely upon the property of a single individual, partnership or corporation.

- *Water Table* - the surface of an unconfined water body at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the water body far enough to hold standing water.

- *Well* - a bored, drilled or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension.

- *Well Injection* - the subsurface emplacement of fluids through a bored, drilled, or driven well or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

- *Withdrawal* - the taking away of surface water from its natural course.

CLEAN WATER ACT

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
Emergency Actions	2-1 through 2-3
Sewage System Approval	2-4
General Permits	2-5
Pollutant Discharge Permits	2-6 through 2-8
Pretreatment	2-9 through 2-11
Surface Water Use Permits	2-12
Groundwater Use Permits	2-13 through 2-19
Land Disposal Permits	2-20 and 2-21
Land Disturbing Activity Permits	2-22 and 2-23
Shoreline *Construction or Alteration* Permits	2-24
Coastal Marshland Construction or Alteration Permits	2-25 and 2-26
Surface Water Quality	2-27 through 2-36
Marine Sanitation Devices	2-37
Injection Wells	2-38 through 2-48

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
EMERGENCY ACTIONS	
2-1. Installations that endanger the waters of the state because of a spill must meet notification standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.05 (3) through (3)(a)).	Determine if the installation has discharged any substance that might produce toxic or taste and color or endanger downstream water users or property. Verify that the Division is notified in person or by telephone when any discharge endangers the waters of the state. Verify that the Division is notified in person or by telephone when a major spill occurs in any POTW system. Verify that all reasonable and necessary steps to prevent injury to property and downstream users of water are taken immediately.
2-2. Installations with POTWs that discover a major spill must meet public notification and monitoring requirements (RGDNR, Chapter 391-3-6, Section 391-3-6-.05 (3)(b) and (c)).	Verify that POTWs with major spills publish a notice of the spill in the legal organ of the County where the spill occurred within 7 days after the spill. Verify that the public notice includes the following: - the date of the spill - location and cause of the spill - estimated volume discharged and name of receiving waters - corrective action taken to mitigate or reduce adverse effects of the spill. Verify that the POTW immediately establishes a monitoring program of the waters affected by a major spill or by consistently exceeding an effluent limit. Verify that the POTW continues the monitoring program for at least 1 year (yr). Verify that the monitoring program includes an upstream sampling point as well as sufficient downstream location to accurately characterize the impact of the spill. Verify that the following parameters are monitored in the receiving stream: - dissolved oxygen - fecal coliform bacteria - pH - temperature. Verify that the results of the monitoring are submitted to the Division and all downstream public agencies which use the affected waters as a source of a public water supply. (NOTE: The Division may determine additional monitoring parameters. Monitoring and reporting frequency is determined by the Division.)

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-3. Installations that are not in compliance with a NPDES permit effluent limitation must meet notification standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.05(4)).	Verify that when the installation does not comply with any effluent limitation specified by the NPDES permit, the Division is notified by an oral report within 24 h and by writing within 5 days of becoming aware of the noncompliant condition. Verify that the written report contains the following information: - a description of the noncompliance and its cause - the period or anticipated period of noncompliance - the steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
SEWAGE SYSTEM APPROVAL	
2-4. Installations that erect, modify or alter a sewage system must obtain approval from the Division (RGDNR, Chapter 391-3-6, Section 391-3-6-.02(3)(a), (b), (f), and (g)).	Verify that installations obtain approval from the Division prior to erecting, modifying, or altering a sewage system. Verify that engineering materials submitted to the Division are prepared by a Professional Engineer competent in the treatment of water pollution. Verify that all proposed lift stations are approved by the Division. Verify that all construction, upgrading or expansion of publicly owned wastewater treatment facilities within the state submit an Environmental Information Document.
GENERAL PERMITS	
2-5. Installations with discharge sources authorized by a general permit must meet waste treatment standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.15).	(NOTE: The Director may require installations authorized by a general permit to obtain an individual NPDES permit.) Determine if the installation has discharge sources authorized by a general permit. Verify that all discharges into a stormwater point source are covered by an individual permit or a permit issued to the operator of that portion of the system that directly discharges into the waters of the state. (NOTE: The Director will designate stormwater runoffs on a case-by-case basis as stormwater point sources. Conveyances that discharge stormwater runoff combined with municipal sewage are point sources that must obtain an NPDES permit but are not stormwater point sources.) Verify that all pollutants receive such treatment or corrective action to comply with the terms and conditions of the permit. Verify that the installation meets discharge permit standards for monitoring, recording and reporting.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-5. (continued)	Verify that all engineering reports, plans, specification and other material submitted to the Division are prepared by a professional engineer competent in the field of sewage and industrial waste treatment.
POLLUTANT DISCHARGE PERMITS	
2-6. Installations that discharge pollutants into the waters of the state must have a valid pollutant discharge permit (RGDNR, Chapter 391-3-6, Sections 391-3-6-.06 (3) and (15)(b)1).	Verify that installations that discharge pollutants into the waters of the state from a point source have a valid pollutant discharge permit. Verify that installations that discharge pollutants from a nonpoint source into the waters of the state have a written approval from the division. Verify that installations with a written approval to discharge use best management practices to minimize the introduction of the pollutants into the waters of the state. Verify that installations that operate treatment works that could discharge into the waters of the state excluding discharges that result from Acts of God have a valid permit. Verify that installations obtain approval from the Director prior to transferring a permit.
2-7. Installations with a permit to discharge pollutants must meet permit conditions and terms (RGDNR, Chapter 391-3-6, Sections 391-3-6-.06 (4) and (11)).	Verify that all pollutants comply with the terms and conditions of the permit. Verify that the installation meets all monitoring, recordkeeping, and reporting requirements specified in the permit. Verify that the installation retains any records of monitoring activities and results for a minimum of 3 yr. Verify that installations that are required to monitor authorized discharges report to the Division all required monitoring activities no less than once per year. (NOTE: The Director may require more frequent reporting and that records be maintained for longer than 3 yr.)

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-8. Installations with a NPDES permit or other discharge permit but are not in compliance with Federal and state regulations must meet compliance schedule standards (RGDNR, Chapter 391-3-6, Section 391-3-6 -.06(10)).	Determine if the installation has a valid NPDES or other discharge permit but is not in compliance with Federal and state regulations. Verify that the installation meets the compliance schedule and interim dates set forth in the permit by the Director. Verify that within 14 days of an interim date of compliance or the final date of compliance, notification of the installation's compliance or non-compliance is submitted in writing to the Director.
PRETREATMENT	
2-9. Installations that discharge or propose to discharge any pollutant from a significant source into a publicly owned treatment works (POTWs) and then into the waters of the state must have a valid pretreatment permit (RGDNR, Chapter 391-3-6, Section 391-3-6 -.08).	Determine if the installation discharges or plans to discharge any pollutant from a significant source into a POTW and then into the waters of the state. Verify that the installation has a valid pretreatment permit. Verify that discharged pollutants receive the required pretreatment or corrective action to comply with the terms and conditions of the pretreatment permit and the following: - any applicable state water quality standards, effluent limitations, pretreatment standards and requirements, or schedule of compliance - any applicable Federal regulations - to insure there is not interference with the operation of a POTW.
2-10. Installations with a valid pretreatment permit must meet permit conditions (RGDNR, Chapter 391-3-6, Section 391-3-6-.08(8)(a), (c), and (d)).	Verify that permit conditions are met. Verify that the permitted installations that are not in compliance with applicable pretreatment standards and limitations or other permit conditions meet compliance schedule and interim dates. Verify that within 14 days of an interim date of compliance or the final date of compliance, notification of the installation's compliance or non-compliance is submitted in writing to the Director. Verify that the installation meets monitoring, recording, and reporting requirements of the permit. Verify that the records of monitoring activities and the results are retained for a minimum of 3 yr. Verify that installations that are required to monitor discharges report to the Division all required monitoring activities at least twice per year. (NOTE: The Division may require an increase in reporting frequency or monitoring records be retained for more than 3 yr.)

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-11. Installations with publically owned treatment works (POTWs) must meet pretreatment program standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.09 (3)(a) through (c)).	Verify that installations with POTWs that meet the following criteria have established a POTW pretreatment program: - have a total design flow greater than 5 million gallons per day (mgd) - receive pollutants from industrial users that may pass through untreated or interfere with the operation of the POTW - are required by Federal requirements to have a pretreatment program. (NOTE: The Director may require POTWs with a total design flow of 5 mgd or less to develop a POTW pretreatment program.) Verify that POTWs required to have a pretreatment program, obtain approval of the program no later than 3 yr after the reissuance or modification of its existing NPDES permit.
SURFACE WATER USE PERMITS	
2-12. Installations that withdraw, divert or impound surface waters of the state must obtain a surface water use permit (RGDNR, Chapter 391-3-6, Section 391-3-6-.07 (3) and (15)(e)).	Determine if the installation meets any of the following permit exempt conditions: - any water diversion accomplished as part of construction for transportation purposes that does not reduce the flow of surface waters in the diverted watercourse by more than 150,000 gal/day on a monthly average - any reduction of flow or surface waters during a period of construction of an impoundment, including the initial filling of the impoundment - any farm pond or farm impoundment constructed and managed for the sole purpose of fish, wildlife, recreation, or other farm uses. Verify that installations that meet the following criteria have a valid surface water use permit: - on a monthly average, withdraws more than 100,000 gal of surface water per day - diverts surface water so as to reduce the flow by more than 100,000 gal/day at the point where the watercourse prior to diversion leaves the property on which the diversion occurs - construct an impoundment that reduces the flow of surface water by more than 100,000 gal/day downstream of the impoundment. Verify that permitted installations except those that withdraw water for farm uses, submit to the Division an annual water use report for the previous calendar year that includes the monthly average and maximum day use for each month.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
GROUNDWATER USE PERMITS	
2-13. Installations that withdraw, obtain or utilize groundwater in excess of 100,000 gal/day must obtain a valid groundwater use permit (RGDNR, Chapter 391-3-2, Section 391-3-2-.03 and 391-3-2.04(3)).	Verify that installations that withdraw, obtain or utilize groundwater in excess of 100,000 gal/day for any purpose except farm use obtain a permit from the Division unless exempted by law or regulations. Verify that installations that withdraw, obtain, or utilize groundwater in excess of 100,000 gal/day on a monthly average have a valid permit. (NOTE: Combinations of farm and nonfarm use or nonconsumptive groundwater use is considered nonfarm use unless otherwise determined by the Director.) Verify that installations have a permit prior to withdrawing or using groundwater.
2-14. Installations with a groundwater use permit must meet permit conditions (RGDNR, Chapter 391-3-2, Section 391-3-2-.06(4) through (6)).	Verify that water withdrawn under a permit is used only for the purposes set forth in the permit. Verify that the installation meets permit conditions. Verify that the Division is notified by registered letter of any changes in the beneficial use or if greater amounts of water are to be withdrawn.
2-15. Installations with groundwater use permits must meet reporting standards (RGDNR, Chapter 391-3-2, Section 391-3-2-.08(1)).	Verify that installations with groundwater use permits, except for farm use, submit a groundwater use report starting 60 days after the permit's effective date and every month thereafter unless otherwise designated by the Division. Verify that the groundwater use report is submitted no later than 15 days after the reporting date. Verify that the groundwater use report includes the following: - permit holder and number - beneficial use of groundwater used - source of groundwater - quantity of water used or withdrawn monthly from each aquifer(s) - average hours pumped per day - for a nonconsumptive use, the amount of water returned to the aquifer or groundwater system from which the water is withdrawn - static and pumping levels of each aquifer utilized and the date the water levels were measured. Verify that water levels are measured during the last month of the reporting period.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-16. Installations with a groundwater use permit must meet specific conductance analysis standards (RGDNR, Chapter 391-3-2, Section 319-3-2-.08(2)).	Verify that specific conductance analysis of the groundwater from the well(s) are performed by a Division approved laboratory starting 60 days after the permit's effective date and annually thereafter unless otherwise specified by the Division. Verify that a copy of the specific conductance analysis report is submitted to the Division not later than 15 days after the reporting date.
2-17. Installations that withdraw groundwater in excess of 100,000 gal/day for dewatering the subsurface rock must have a valid permit (RGDNR, Chapter 391-3-2, Section 391-3-2-.09).	Determine if the installation has any dewatering wells. Verify that installations that withdraw water in excess of 100,000 gal/day for dewatering the subsurface rock for a period of greater than 60 days for any of the following purposes have a valid groundwater use permit unless otherwise specified by the Division: - construction of trenches for sewer or water pipes - excavation for foundations - utility construction. Verify that installations with permitted wells that dewater the subsurface rock to a depth greater than 30 ft are approved by the Division. (*NOTE: Installations that withdraw water in excess of* 100,000 gal/day for a period of not more than 60 days are not required to have a permit.)
2-18. Installations with wells drilled as part of a testing program must meet specific standards (RGDNR, Chapter 391-3-2, Sections 391-3-2-.13 and 391-3-2-.14(4)).	Verify that installations that drill wells for the purpose of obtaining geologic and hydrologic information for the study of groundwater have submitted all information obtained from the testing program to the Division. Verify that prior approval from the Division is obtained for the testing program. Verify that test wells drilled and not developed for groundwater use and not used as observation wells are plugged and sealed in compliance with abandoned wells regulations. Verify that approved observation wells used for groundwater investigation or management not equipped with pumps are covered with a secure cap when measurements are not being made.
2-19. Installations with abandoned wells must meet specific plugging and filling standards (RGDNR, Chapter 391-3-2, Section 391-3-2-.14).	Verify that any existing wells that meet any of the following criteria are plugged and sealed: - are abandoned wells that are no longer put to beneficial use - are deemed by the Division to have potentially adverse effects on water users - may result in physical or chemical impairment of the aquifer or groundwater system.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-19. (continued)	Verify that the Division is informed by a certified statement from the contractor within 30 days after sealing a well in accordance with Division approved procedures. (NOTE: Approved observation wells are not considered abandoned provided they are maintained for this purpose.)
LAND DISPOSAL PERMITS	
2-20. Installations that discharge pollutants into land disposal or land treatment systems and then into waters of the state must have a valid land disposal permit (RGDNR, Chapter 391-3-6, Section 391-3-6-.11 (3)).	(NOTE: Installations with land disposal or land treatment systems that employ overland flow, subsurface drain fields or other techniques with a point discharge into the surface waters of the state, must obtain an NPDES permit and not a land disposal permit. Installations with a POTW that employ land disposal or land treatment systems must obtain a pretreatment permit.) Determine if the installation discharges domestic, municipal, commercial, or industrial wastes or wastewaters into a land disposal or land treatment system and then into the waters of the state. Verify that the installation had obtained a land disposal permit.
2-21. Installations with a valid land disposal permit must meet permit conditions (RGDNR, Chapter 391-3-6, Section 391-3-6-.11(4), (7), and (8)).	Verify that discharged pollutants into a land disposal or land treatment system receive treatment or corrective action to insure compliance with terms and conditions of the issued land disposal system permit. Verify that the permitted installations that are not in compliance with applicable pollutant treatment requirements and limitations or other permit conditions meet compliance schedule and interim dates in the permit and by the Director. Verify that within 14 days of an interim date of compliance or the fina. date of compliance, notification of the installation's compliance or noncompliance is submitted in writing to the Director. Verify that the installation meets monitoring, recording, and reporting requirements of the permit. Verify that the records of monitoring activities and the results are retained for a minimum of 3 yr. Verify that installations that are required to monitor discharges report to the Division all required monitoring activities at least once per year. (NOTE: The Division may require an increase in reporting frequency and monitoring records be retained for more than 3 yr.)

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
LAND DISTURBING ACTIVITY PERMITS	

2-22. Installations that engage in land disturbing activities must have a valid land disturbing activity permit (RGDNR, Chapter 391-3-7, Section 391-3-7-.03; and O.C.G.A., Section 12-7-17).	Determine if the installation meets any of the permit exempt land disturbing activities:
	- surface mining and granite quarrying
	- minor activities that result in minor soil erosion such as individual home landscaping and maintenance work
	- single-family residence construction contracted by the owner for the owner's occupancy
	- single-family residences not part of a larger project
	- Soil and Water Conservation Service activities
	- projects involving 1.10 acres or less provided:
	  - project is not within 200 ft of the bank of any state waters excluding intermittent channels, drainage ways, and streams
	  - project is within 200 ft of an intermittent channel or drainage way but soil is prevented from moving beyond property boundaries.
	- Department of Transportation activities
	- airport authority activities
	- electric membership corporation, municipal electrical system, or public utility activities.
	
	Verify that the installation has obtained a valid permit from the Division prior to performing land disturbing activities.
	
	(NOTE: Projects that are developed in phases may be required to obtain a permit for each phase.)

2-23. Installations with a land disturbing activity permit must meet specific standards (RGDNR, Chapter 391-3-7, Sections 391-3-7-.06 through 391-3-7-.08; and O.C.G.A, Section 12-7-6(16) and (18)).	Verify that the installation maintains an undisturbed natural vegetative buffer of 25 ft adjacent to any state waters except as otherwise required by the Metropolitan River Protection Act or the Division. Verify that land disturbing activities with the exception of roadway drainage structures are not conducted within 100 ft horizontally of the banks of trout streams without a granted variance. Verify that the turbidity of stormwater runoff discharges are controlled and do not exceed the following limits: - 50 nephelometric turbidity units (NTU) higher than the turbidity level of the receiving stream immediately upstream from the stormwater discharge at the time of discharge - where a roadway drainage structure must be constructed, 60 NTU higher than the turbidity level of the receiving stream immediately upstream from the construction site. Verify that downstream turbidity measurements are taken at points where the entering discharge is fully mixed with the receiving stream flow.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SHORELINE CONSTRUCTION OR ALTERATION PERMITS	
2-24. Installations that engage in shoreline engineering activity or land alteration of the shoreline must have a valid permit (RGDNR, Chapter 391-2-2, Sections 391-2-2 -.04 and 391-2-2-.05(7)).	Determine if the installation meets any of the following permit exemption criteria: - structure, shoreline, engineering activity or land alteration that existed as of 25 April 1979 - reconstruction of any structure or land alteration that is appraised to be 80 percent or less destroyed of a fair market value or which is destroyed by other than wave action. Verify that installations that construct, erect, or engage in any shoreline engineering activity or land alteration that alters the natural topography or vegetation of any area within the Act's jurisdiction and is not exempt has a valid permit. (NOTE: A permit is required for both project construction and project maintenance except maintenance that does not alter the natural topography or vegetation.) (NOTE: Installations that modify, construct additions or extensions to structures that existed as of 25 April 1979 must obtain a permit.) Verify that the Committee is notified in writing within 30 days of the transfer of a permit.
COASTAL MARSHLAND CONSTRUCTION OR ALTERATION PERMITS	
2-25. Installations that remove, fill, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands must have a valid permit (RGDNR, Chapter 391-3-6, Section 12-5 -286(a), and Chapter 391-2-3, Section 391-2-3 -.02(1)).	Determine if the installation is exempt from obtaining a permit for altering any marshlands: - Department of Transportation public road system activities - United States and Georgia agencies engaged in keeping state rivers and harbors open for navigation - public utility company activities - railroad company activities - political subdivision's approved water and sewer activities - building of private, noncommercial docks on pilings, with walkways above the marsh grass. Verify that installations that remove, fill, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands within the estuarine area have obtained a permit prior to the activity.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-25. (continued)	(NOTE: A permit is required for both project construction and project maintenance that does not alter marshlands. Dwellings on stilts are not exempt from permit conditions.)
2-26. Installations with a permit to alter or construct upon marshlands must meet specific standards (RGDNR, Sections 12-5-286(p), 12-5-292, and 12-5-293).	Verify that the Department is notified within 30 days of completion of permitted work. Verify that the installation prominently posts a copy of the permit within the area of the proposed activity. Verify that installations notify the Department in writing 30 days prior to the transfer of a permit.
SURFACE WATER QUALITY	
2-27. Installations must meet general water quality criteria standards (RGDNR, Chapter 391-3-6, Section 391-3-6 -.03(5)(a) through (e)).	Verify that all waters are free from materials associated with municipal or domestic sewage, industrial waste or any other waste that settles to form putrescent, unsightly, or otherwise objectionable sludge deposits. Verify that all waters are free from oil, scum, and floating debris associated with municipal or domestic sewage, industrial waste, or other discharges in unsightly amounts or amounts that interfere with legitimate water uses. Verify that all waters are free from material related to municipal, industrial or other discharges that produce turbidity, color, odor, or other objectionable conditions that interfere with legitimate water uses. Verify that all waters are free from toxic, corrosive, acidic and caustic substances discharged from municipalities, industries, or other sources, such as nonpoint sources, in amounts, concentration, or combinations that are harmful to humans, animals, or aquatic life. Verify that applicable state and Federal regulations for the discharge of radioactive substances are met at all times.
2-28. Installations must meet instream concentration standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.03(5)(d)(i) through (v)).	Verify that instream concentrations of the following chemical constituents do not exceed the criteria indicated under 7-day, 10-yr minimum flow or higher stream flow conditions except within established mixing zones: - Methoxyclor, 0.03 μg/L - 2,4-Dichlorphenoxyacetic acid, 100 μg/L - TP Silvex, 10 μg/L. Verify that instream concentrations of USEPA toxic priority pollutants do not exceed the criteria in Appendix 2-1 under 7-day, 10-yr minimum flow or higher stream flow conditions except within established mixing zones.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-28. (continued)	Verify that instream concentrations of USEPA toxic priority pollutants do not exceed the criteria in Appendix 2-2 under annual average or higher stream conditions. Verify that instream concentrations of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) does not exceed 0.0000012 $\mu g/L$ under long-term average stream flow conditions. (NOTE: Site specific criteria for asbestos will be determined on an as-needed basis through toxic pollutant monitoring.)

2-29. Installations that have waters approved as a source for public drinking water systems permitted or to be permitted by the Environmental Protection Division must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6 -.03(6)(a)).	Determine if the installation has waters approved as a source for public drinking water systems permitted or to be permitted by the Environmental Protection Division.
	
	Verify that at least four fecal coliform samples are collected from a given sampling site over a 30-day period at intervals not less than 24 h.
	
	Verify that from May through October fecal coliform samples do not exceed the following criteria based on a geometric mean analysis:
	
	- 200/100 mL
	- if nonhuman fecal coliform exceeds 200/100 mL occasionally:
	  - 300/100 mL in lakes and reservoirs
	  - 500/100 mL in free flowing fresh water streams.
	
	Verify that from November through April fecal coliform samples do not exceed the following criteria based on a geometric mean analysis:
	
	- 1000/100 mL
	- 4000/100 mL in any one sample.
	
	Verify that the daily average of dissolved oxygen is 6.0 mg/L and no less than 5.0 mg/L at all times for waters designated as trout streams by the Game and Fish Division.
	
	Verify that the daily average of dissolved oxygen is 5.0 mg/L and no less than 4.0 mg/L at all times for water supporting warm water species of fish.
	
	Verify that the pH is within the range of 6.0 to 8.5.
	
	Verify that no material or substance exists in such concentrations, that after treatment by the public water treatment system, maximum contaminant levels established for the substance are exceeded.
	
	Verify that the waters meet the following temperature criteria:
	
	- does not exceed 90 °F
	- receiving waters are not increased more than 5 °F above intake temperature except in estuarine waters; the increase is not more than 1.5 °F

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-29. (continued)	- streams designated as primary trout or smallmouth bass waters, no elevation of natural stream temperatures - streams designated as secondary trout waters, no elevation exceeding 2 °F of natural stream temperatures.

2-30. Installations that have waters designated as recreational use must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6 -.03(6)(b)).	Determine if the installation has waters classified as recreational use waters.
	
	Verify that at least four fecal coliform samples are collected from a given sampling site over a 30-day period at intervals not less than 24 h.
	
	Verify that fecal coliform samples do not exceed the following criteria based on a geometric mean analysis:
	
	- coastal waters, 100/100 mL
	- all other recreational waters, 200/100 mL
	- if natural fecal coliform levels exceed 200/100 mL occasionally:
	  - 300/100 mL in lakes and reservoirs
	  - 500/100 mL in free flowing freshwater streams.
	
	Verify that the daily average of dissolved oxygen is 6.0 mg/L and no less than 5.0 mg/L at all times for waters designated as trout streams by the Game and Fish Division.
	
	Verify that the daily average of dissolved oxygen is 5.0 mg/L and no less than 4.0 mg/L at all times for water supporting warm water species of fish.
	
	Verify that the pH is within the range of 6.0 to 8.5.
	
	Verify that the waters meet the following temperature criteria:
	
	- does not exceed 90 °F
	- receiving waters are not increased more than 5 °F above intake temperature except in estuarine waters, the increase is not more than 1.5 °F
	- streams designated as primary trout or smallmouth bass waters, no elevation of natural stream temperatures
	- streams designated as secondary trout waters, no elevation exceeding 2 °F of natural stream temperatures.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

2-31. Installations that have water with the water use classification of fishing must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.03(6)(c)).	Determine if the installation has waters with the water use classification of fishing including the propagation of fish, shellfish, game or other aquatic life.
	
	Verify that the daily average of dissolved oxygen is 6.0 mg/L and no less than 5.0 mg/L at all times for waters designated as trout streams by the Game and Fish Division.
	
	Verify that the daily average of dissolved oxygen is 5.0 mg/L and no less than 4.0 mg/L at all times for waters supporting warm water species of fish.
	
	Verify that the pH is within the range of 6.0 to 8.5.
	
	Verify that at least four fecal coliform samples are collected from a given sampling site over a 30 days period at intervals not less than 24 h.
	
	Verify that from May through October fecal coliform samples do not exceed the following criteria based on a geometric mean analysis:
	
	- 200/100 mL
	- if nonhuman fecal coliform exceeds 200/100 mL occasionally,
	  - 300/100 mL in lakes and reservoirs
	  - 500/100 mL in free flowing fresh water streams.
	
	Verify that from November through April fecal coliform samples do not exceed the following criteria based on a geometric mean analysis:
	
	- 1000/100 mL
	- 4000/100 mL in any one sample.
	
	Verify that the waters meet the following temperature criteria:
	
	- does not exceed 90 °F
	- receiving waters are not increased more than 5 °F above intake temperature except in estuarine waters, the increase is not more than 1.5 °F
	- streams designated as primary trout or smallmouth bass waters, no elevation of natural stream temperatures
	- streams designated as secondary trout waters, no elevation exceeding 2 °F of natural stream temperatures.
	
	(NOTE: Installations with waters classified as coastal fishing will be assigned site specific dissolved oxygen criteria and the fishing use classification will apply for all other criteria.)

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-32. Installations that have waters designated as agricultural must meet specific standards (RGDNR, Chapter 3-6, Section 391-3-6-.03 (6)(d)).	Determine if the installation has waters designated as agricultural. Verify that dissolved oxygen levels are no less than 3.0 mg/ L at any time. Verify that the pH is within the range of 6.0 to 8.5. Verify that fecal coliform does not exceed a geometric mean of 5000/100 mL based on at least four samples collected from a given sampling site taken over a 30-day period at intervals not less than 24 h. Verify that the waters meet the following temperature criteria: - does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature except in estuarine waters, the increase is not more than 1.5 °F.
2-33. Installations that have waters designated as industrial must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.03 (6)(e)).	Determine if the installation has waters designated as industrial. Verify that dissolved oxygen levels are no less than 3.0 mg/ L at any time. Verify that the pH is within the range of 6.0 to 8.5. Verify that the waters meet the following temperature criteria: - does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature except that in estuarine waters the increase is not more than 1.5 °F.
2-34. Installations that have waters designated as navigational must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.03 (6)(f)).	Determine if the installation has waters designated as navigational. Verify that dissolved oxygen levels are no less than 3.0 mg/ L at any time. Verify that the pH is within the range of 6.0 to 8.5. Verify that fecal coliform does not exceed a geometric mean of 5000/100 mL based on at least four samples collected from a given sampling site taken over a 30-day period at intervals not less than 24 h. Verify that the waters meet the following temperature criteria: - does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature except in estuarine waters, the increase is not more than 1.5 °F.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-35. Installations that have waters designated as an urban stream must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.03 (6)(i)).	Determine if the installation has waters designated as an urban stream. Verify that dissolved oxygen levels are no less than 3.0 mg/ L at any time. Verify that the pH is within the range of 6.0 to 8.5. Verify that fecal coliform does not exceed a geometric mean of 2000/100 mL based on at least four samples collected from a given sampling site taken over a 30-day period at intervals not less than 24 h. Verify that any one fecal coliform sample does not exceed 5000/100 mL.
2-36. Installations with waters designated as a "wild river" or "scenic river" must not be altered (RGDNR, Chapter 391-3-6, Section 391-3-6-.03 (6)(g) and (h)).	Verify that installations with waters designated as a "wild river" or a "scenic river" do not alter the natural water quality from any source.
MARINE SANITATION DEVICES	
2-37. Installations with marine toilets or disposal units on boats that operate on the waters of the state must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.04 (3) and (4)).	(NOTE: These regulations do not apply to ocean going vessels of 20 tons displacement or more.) Determine if the installation has marine toilets or disposal units on boats that operate on the waters of the state. Verify that marine toilets or other disposal units have securely affixed to the interior discharge toilet or unit a suitable marine sanitation device designed, constructed and operated in accordance with applicable requirements. Verify that all sewage passing into or through the marine toilet or other disposal unit is discharged solely to a marine sanitation device. Verify that all discharges from marine sanitation devices into or upon the waters of the state are in compliance with Federal standards. Verify that installations that operate vessels with marine toilets on Lake Sidney Lanier discharge only into holding tanks located on the vessel and meet the following criteria: - the holding tank is constructed to prevent removal of the sewage except by pumping - the holding tank is properly vented to the outside air so as not to foul the interior of the boat structure - chemicals added to the holding tank are approved by the Division

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-37. (continued)	- the contents of the holding tank are disposed of only through Division approved onshore facilities.
INJECTION WELLS	
2-38. Installations with injection activity must not allow fluid to contaminate underground sources of drinking water (RGDNR, Chapter 391-3-6, Section 391-3-6-.13 (5))	Verify that installations do not construct, operate, maintain, convert, plug, abandon, or conduct any injection activity that allows fluid to contaminate underground sources of drinking water so that primary drinking water regulations are violated or the health of persons are adversely affected.
2-39. Installations with Class I, II, or III injection wells must meet permit conditions (RGDNR, Chapter 391-3-6, Section 391-3- 6-.13(6)(a), (b), (8)(a), and (c)).	Verify that installations that construct or operate a Class I, II, or III injection well have obtained an injection well permit. (NOTE: Class II well permits do not include exploration, drilling and well construction for oil and/or gas production.) Verify that hazardous waste or radioactive wastes are not emplaced by well injection into the subsurface or waters of the state. Verify that the permit conditions are met. Verify that installations with a corrective action permit condition, take all required corrective action prior to beginning injection. (NOTE: The Director may require as a permit condition, an injection pressure limitation.)
2-40. Installations with injection wells not in compliance with permit conditions must meet reporting standards (RGDNR, Chapter 391-3-6, Section 391-3-6 -.13 (8)(d)).	Verify that installations with permitted injection wells report any of the following monitoring or information that indicates: - a contaminant that could endanger a fresh water zone or underground source of drinking water - any noncompliance of a permit condition or malfunction of the injection system that may cause fluid migration into or between fresh water zones or underground sources of drinking water. Verify that noncompliance with a permit condition or a malfunction of the injection information is reported by telephone to the Director within 24 h and a written submission within 5 days of the oral notification. Verify that the written report contains the following: - a description of the noncompliance and its cause - the period of the noncompliance - the corrective action taken to reduce or eliminate the noncompliance - the steps planned to prevent a recurrence of the noncompliance.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-41. Installations with permitted injection wells must operate the wells within volume and pressure limitations (RGDNR, Chapter 391-3-6, Section 391-3-6 -.13(8)(f)).	Verify that installations operate the injection wells so as not to exceed maximum injection volumes and pressures to assure the following: - fractures are not initiated in the confining zone - injected fluids do not migrate into fresh water zones or underground sources of drinking water - formation fluids are not displaced into underground sources of drinking water. (NOTE: The Director will establish such volumes and pressure limits as permit conditions.)
2-42. Installations must not begin injections in wells prior to approval from the Director (RGDNR, Chapter 391-3-6, Section 391-3-6-.13 (8)(g)).	Verify that installations have submitted a notice of completion of construction of an injection well to the Director. Verify that installations obtain written approval from the Director prior to beginning injections in wells.
2-43. Installations with permitted Class I, II, or III injection wells must meet notification standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.13(8)(h) through (j)).	Verify that the Director is notified in writing of any proposed abandonment of an injection well. Verify that the installation submits an application at least 90 days prior to the expiration date of an injection well permit or injection is ceased upon expiration of the permit. Verify that the Director is notified in writing at least 30 days prior to the transfer of a permit.
2-44. Installations with Class I or II wells must meet siting standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.13 (10)).	Verify that Class I wells are sited so that wells inject into a formation beneath the lowermost formation containing an underground source of drinking water within a 2 mi radius of the well bore or greater if determined by the Director. Verify that Class II wells are sited so that they inject into a formation that is separated from an underground source of drinking water by a confining zone that is free of known open faults or fractures within the area of review.

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-45. Installations with Class I, II, or III wells must meet plugging and abandoning standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.13 (14)).	Verify that the installation notifies the Director in writing of an intent to abandon a Class I, II, or III permitted injection well at least 45 days prior to abandonment. Verify that abandoned wells are plugged with cement so that fluids do not move either into or between underground sources of drinking water. Verify that the placement of cement in the well is accomplished by the balance method, dump bailer method or two-plug method. Verify that the well to be cemented is in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a Director approved comparable method prior to the placement of cement plugs. (NOTE: The Director may require groundwater monitoring after well abandonment.) Verify that the installation certifies to the Director that the injection wells was plugged according to permitted procedures within 30 days of plugging.
2-46. Installations with Class IV injection wells must meet specific standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.13(3)(d)3).	Verify that installations do not emplace hazardous waste or radioactive waste by well injection into the subsurface or waters of the state.
2-47. Installations with Class V injection wells must meet permit conditions (RGDNR, Chapter 391-3-6, Section 391-3-6-.13(12)).	Determine if the installation has a Class V injection well. Verify that the installation has obtained a valid permit prior to construction of a Class V well. Verify that Class V wells are sited so that injection fluid does not contaminate an underground source of drinking water. Verify that Class V wells are constructed as follows: - by a licensed water well contractor in the State of Georgia - the casing extends at least 5 ft into the injection zone - the annular space around the entire length of the case is grouted and sealed to prevent pollution by surface waters, other formation fluids or pollutants into the formation above the injection zone. - any other construction requirements specified by the Director. Verify that the Director is notified in writing at least 30 days prior to the transfer of a permit. (NOTE: Permit conditions may include monitoring, testing, and reporting requirements.)

COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
2-47. (continued)	Verify that wells that are plugged and abandoned are completely filled with cement grout.
2-48. Class V wells must meet mechanical integrity standards (RGDNR, Chapter 391-3-6, Section 391-3-6-.13 (13)).	Verify that one of the following methods is used to evaluate the absence of detectable leaks: - monitoring or annulus pressure - pressure test with liquid or gas. Verify that the results of a temperature or noise log is used to determine the absence of detectable fluid movement into an underground source of drinking water. Verify that reports of the results of mechanical integrity tests submitted to the Director, include a description of the test(s) and method(s) used.

Appendix 2 - 1

Instream Concentrations of USEPA Toxic Priority Pollutants Under 7-Day, 10-Year Minimum Flow or Higher Stream Flow Conditions

(Source: RGDNR, Chapter 391-3-6, Section 391-3-6-.03(5)(d)(ii))

1.	Arsenic		
	(a) Freshwater	50	µg/L
	(b) Coastal and Marine Estuarine Waters	36	µg/L
2.	Total Chromium		
	(at hardness levels less than 100 mg/L)	120	µg/L
	(at hardness levels of 100 mg/L to 199 mg/L)	210	µg/L
	(at hardness levels greater than or equal to 200 mg/L)	370	µg/L
	NOTE: Total hardness expressed as $CaCO_3$.		
3.	Cyanide*		
	(a) Freshwater	5.2	µg/L
	(b) Coastal and Marine Estuarine Waters	1.0	µg/L
4.	Mercury*		
	(a) Freshwater	0.012	µg/L
	(b) Coastal and Marine Estuarine Waters	0.025	µg/L
5.	Phenol	300	µg/L
6.	Zinc		
	(a) Freshwater		
	(at hardness levels less than 100 mg/L)	60	µg/L
	(at hardness levels of 100 mg/L to 199 mg/L)	110	µg/L
	(at hardness levels greater than or equal to 200 mg/L)	190	µg/L
	Note: Total hardness expressed as $CaCO_3$.		
	(b) Coastal and Marine Estuarine Waters	86	µg/L
7.	Endrin*	0.002	µg/L
8.	Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]	0.08	µg/L
9.	Cadmium		
	(a) Freshwater		
	(at hardness levels less than 100 mg/L)	0.7	µg/L*
	(at hardness levels of 100 mg/L to 199 µg/L)	1.1	µg/L*
	(at hardness levels greater than or equal to 200 mg/L)	2.0	µg/L*
	Note: Total hardness expressed as $CaCO_3$.		
	(b) Coastal and Marine Waters	9.3	µg/L

10.	Copper		
	(a) Freshwater		
	(at hardness levels less than 100 mg/L)	6.5	μg/L*
	(at hardness levels of 100 mg/L to 199 mg/L)	12	μg/L
	(at hardness levels greater than or equal to 200 mg/L)	21	μg/L
	Note: Total hardness expressed as $CaCO_3$.		
	(b) Coastal and Marine Estuarine Waters	2.9	μg/L*
11.	Lead*		
	(a) Freshwater		
	(at hardness levels less than 100 mg/L)	1.3	μg/L
	(at hardness levels of 100 mg/L to 199 mg/L)	3.2	μg/L
	(at hardness levels greater than or equal to 200 mg/L)	7.7	μg/L
	Note: Total hardness expressed as $CaCO_3$.		
	(b) Coastal and Marine Estuarine Waters	5.6	μg/L
12.	Nickel		
	(a) Freshwater		
	(at hardness levels less than 100 mg/L)	88	μg/L
	(at hardness levels of 100 mg/L to 199 mg/L)	160	μg/L
	(at hardness levels greater than or equal to 200 mg/L)	280	μg/L
	Note: Total hardness expressed as $CaCO_3$.		
	(b) Coastal and Marine Estuarine Waters	8.3	μg/L
13.	Silver*	0.12	μg/L
14.	Chromium (VI)		
	(a) Freshwater	11	μg/L
	(b) Coastal and Marine Estuarine Waters	50	μg/L
15.	Selenium		
	(a) Freshwater	5.0	μg/L
	(b) Coastal and Marine Estuarine Waters	71	μg/L
16.	Pentachlorophenol*		
	(a) Freshwater	2.1	μg/L
	(b) Coastal and Marine Estuarine Waters	7.9	μg/L
17.	Chlordane*		
	(a) Freshwater	0.0043	μg/L
	(b) Coastal and Marine Estuarine Waters	0.004	μg/L
18.	4,4'-DDT*	0.001	μg/L
19.	Dieldrin*	0.0019	μg/L
20.	a-Endosulfan*		
	(a) Freshwater	0.056	μg/L
	(b) Coastal and Marine Estuarine Waters	0.0087	μg/L
21.	b-Endosulfan*		
	(a) Freshwater	0.056	μg/L
	(b) Coastal and Marine Estuarine Waters	0.0087	μg/L

22.	Heptachlor*		
	(a) Freshwater	0.0038	µg/L
	(b) Coastal and Marine Estuarine Waters	0.0036	µg/L
23.	Heptachlor Epoxide*		
	(a) Freshwater	0.0038	µg/L
	(b) Coastal and Marine Estuarine Waters	0.0036	µg/L
24.	Toxaphene*	0.0002	µg/L
25.	PCB-1242	0.014	µg/L
26.	PCB-1254	0.014	µg/L
27.	PCB-1221	0.014	µg/L
28.	PCB-1232	0.014	µg/L
29.	PCB-1248	0.014	µg/L
30.	PCB-1260	0.014	µg/L
31.	PCB-1016	0.014	µg/L

* The instream criterion is lower than the Environmental Protection Division laboratory detection limits.

Appendix 2 - 2

Instream Concentrations of USEPA Toxic Priority Pollutants Under Annual Average or Higher Stream Flow Conditions

(Source: RGDNR, Chapter 391-3-6, Section 391-3-6-.03(5)(d)(iii))

1. Antimony	4308	µg/L
2. Arsenic	0.14	µg/L
3. Beryllium	0.117	µg/L
4. Thallium	48	µg/L
5. Acrolein	780	µg/L
6. Acrylonitrile	0.665	µg/L
7. Benzene	71.28	µg/L
8. Bromoform (Tribromomethane)	470.8	µg/L
9. Carbon Tetrachloride	4.42	µg/L
10. Chlorobenzene	20	µg/L
11. Chlorodibromomethane	470.8	µg/L
12. 2-Chloroethylvinyl Ether	17.6	µg/L
13. Chloroform (Trichloromethane)	470.8	µg/L
14. Dichlorobromomethane	470.8	µg/L
15. 1,2-Dichloroethane	98.6	µg/L
16. 1,1-Dichloroethylene	3.2	µg/L
17. 1,3-Dichloropropylene (Cis)	31.3	µg/L
18. 1,3-Dichloropropylene (Trans)	31.3	µg/L
19. Ethylbenzene	28718	µg/L
20. Methyl Bromide (Bromomethane)	470.8	µg/L
21. Methyl Chloride (Chloromethane)	470.8	µg/L
22. Methylene Chloride	1578	µg/L
23. 1,1,2,2-Tetrachloroethane	10.8	µg/L
24. Tetrachloroethylene	8.85	µg/L
25. Toluene	301941	µg/L
26. 1,2-Trans-Dichloroethylene	136319	µg/L
27. 1,1,2-Trichloroethane	41.99	µg/L
28. Trichloroethylene	80.7	µg/L
29. Vinyl Chloride	525	µg/L
30. 2-Chlorophenol	0.1	µg/L
31. 2,4-Dichlorophenol	0.3	µg/L
32. 2,4-Dimethylphenol	400	µg/L
33. 2-Methyl-4,6-Dinitrophenol	765	µg/L
34. 2,4-Dinitrophenol	14264	µg/L
35. 3-Methyl-4-Chlorophenol	3000	µg/L
36. 2,4,6-Trichlorophenol	3.6	µg/L
37. Acenaphthene	20	µg/L
38. Acenaphthylene	0.0311	µg/L
39. Anthracene	0.0311	µg/L
40. Benzidine	0.000535	µg/L
41. Benzo(a)Anthracene	0.0311	µg/L
42. Benzo(a)Pyrene	0.0311	µg/L
43. 3,4-Benzofluoranthene	0.0311	µg/L
44. Benzo(ghi)Perylene	0.0311	µg/L

45. Benzo(k)Fluoranthene	0.0311	µg/L
46. Bis(2-Chloroethyl)Ether	1.42	µg/L
47. Bis(2-Chloroisopropyl)Ether	4360	µg/L
48. Bis(2-Ethylhexyl)Phthalate	5.92	µg/L
49. Chrysene	0.0311	µg/L
50. Dibenzo(a,h)Anthracene	0.0311	µg/L
51. 1,2-Dichlorobenzene	2600	µg/L
52. 1,3-Dichlorobenzene	2600	µg/L
53. 1,4-Dichlorobenzene	2600	µg/L
54. 3,3'-Dichlorobenzidine	0.02	µg/L
55. Dimethyl Phthalate	2900000	µg/L
56. Di-n-Butyl Phthalate	12100	µg/L
57. 2,4-Dinitrotoluene	9.1	µg/L
58. 1,2-Diphenylhydrazine	0.54	µg/L
59. Fluoranthene	54	µg/L
60. Fluorene	0.031	µg/L
61. Hexachlorobenzene	0.00074	µg/L
62. Hexachlorobutadiene	49.7	µg/L
63. Hexachlorocyclopentadiene	1.0	µg/L
64. Hexachloroethane	8.85	µg/L
65. Indeno(1,2,3-cd)Pyrene	0.0311	µg/L
66. Isophorone	520000	µg/L
67. Nitrobenzene	30	µg/L
68. N-Nitrosodimethylamine	8.12	µg/L
69. N-Nitrosodi-n-Propylamine	8.55	µg/L
70. N-Nitrosodiphenylamine	16.2	µg/L
71. Phenanthrene	0.0311	µg/L
72. Pyrene	0.0311	µg/L
73. 1,2,4-Trichlorobenzene	15385	µg/L
74. Aldrin	0.000136	µg/L
75. a-BHC-Alpha	0.0131	µg/L
76. b-BHC-Beta	0.046	µg/L
77. Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]	0.0625	µg/L
78. Chlordane	0.000588	µg/L
79. 4,4'-DDT	0.00059	µg/L
80. Dieldrin	0.000144	µg/L
81. Heptachlor	0.000214	µg/L
82. Heptachlor Epoxide	0.000214	µg/L
83. PCB-1242	0.00045	µg/L
84. PCB-1254	0.00045	µg/L
85. PCB-1221	0.00045	µg/L
86. PCB-1232	0.00045	µg/L
87. PCB-1248	0.00045	µg/L
88. PCB-1260	0.00045	µg/L
89. PCB-1016	0.00045	µg/L

INSTALLATION:	COMPLIANCE CATEGORY: CLEAN WATER ACT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 3

SAFE DRINKING WATER ACT

Georgia Supplement

SECTION 3

SAFE DRINKING WATER ACT

Georgia Supplement

Definitions

The following definitions contained in 40 CFR 141.2 for the following terms were adopted and incorporated by reference: best available technology or BAT, compliance cycle, compliance period, initial compliance period, repeat compliance period, action level, corrosion inhibitor, effective corrosion inhibitor residual, first draw sample, large water system, lead service line, medium size water system, optimal corrosion control treatment, service line sample, single family structure, and small water system.

These definitions were obtained from the *Rules of Georgia Department of Natural Resources Environmental Protection Division*, Chapter 391-3-5, Section 391-3-5-.02.

- *Act* - the *Georgia Safe Drinking Water Act of 1977.*
- *Community Water System (CWS)* - a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
- *Contaminant* - any physical, chemical, biological, or radiological substance or matter in water.
- *Department* - the Department of Natural Resources of the State of Georgia.
- *Director* - the Director of the Environmental Protection Division, Department of Natural Resources of the State of Georgia, or his designee.
- *Disinfectant* - any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms.
- *Division* - the Environmental Protection Division, Department of Natural Resources of the State of Georgia.
- *Dose Equivalent* - the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements (ICRU).
- *Drinking Water* - water supplied for domestic use or human consumption from a public water system, meeting the maximum contaminant levels set forth in these rules.
- *EPA* - the United States Environmental Protection Agency.
- *Federal Act* - the Federal *Safe Drinking Water Act*, Public Law (PL) 93-523.
- *Gross Alpha Particle Activity* - the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

- *Gross Beta Particle Activity* - the total radioactivity due to beta particle emission as inferred from measurement on a dry sample.

- *Groundwater* - water obtained from wells and used as a source of water supply for a public water system. Springs are considered groundwater for the purposes of this Act, but may be considered groundwater under the direct influence of surface water, depending upon the quality of the source.

- *Halogen* - one of the chemical elements chlorine, bromine or iodine.

- *Manmade Beta Particle and Photon Emitters* - all radionuclides emitting beta particles and/or photons listed in Maximum Permissible body burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, NBS Handbook 69, except the daughter products of thorium-232, uranium-235, and uranium-238.

- *Maximum Contaminant Level (MCL)* - the maximum permissible level of a contaminant in water which is delivered to the free flowing drinking water outlet of the ultimate user of a public water system, except in the case of turbidity on or before 28 June 1993, where the maximum permissible level is measured at the point of entry to the distribution system or in the system's filtered water where applicable, and except in the case of certain volatile synthetic organic chemicals where measurements are made as set forth in rules on organic chemical sampling and analytical requirements. On 29 June 1993, the maximum contaminant level for turbidity is deleted and replaced by a treatment technique requirement as set forth in these rules. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

- *Maximum Contaminant Level Goal (MCLG)* - the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety.

- *Maximum Total Trihalomethane Potential (MTTP)* - the maximum concentration of total trihalomethanes produced in a given water containing a disinfectant residual after 7 days at a temperature of 25°C or above.

- *Noncommunity Water System* - a public water system that is not a community water system and may be further classified as a "nontransient, noncommunity water system", or a "transient, noncommunity water system:"
  1. "Nontransient, Noncommunity System" - a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year (mo/yr)
  2. "Transient, Noncommunity System" - a public water system that is not a community or a nontransient, noncommunity water system and that regularly serves at least 25 persons over 6 mo/yr.

- *Operator* - the person responsible for the maintenance and operation of the public water system. A certified operator is an operator registered as a Water Treatment Plant Operator in the State of Georgia in accordance with the provisions of the *Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysis Act* (Georgia Laws 1969, pp. 272 et seq., as amended). For purposes of this Act a certified operator also includes persons involved with only the storage and distribution of drinking water.

- *Picocurie (pCi)* - that quantity of radioactive material producing 2.22 nuclear transformations per minute.

- *Product* - any chemical or substance added to a public water supply, any materials used in the manufacture of public water supply components or appurtenances, or any pipe, storage tank, valve, fixture or other materials which come in contact with water intended for use in a public water supply.

- *Professional Engineer* - a person registered to practice professional engineering in the State of Georgia in accordance with the provisions of the Act governing the Practice of Professional Engineering in Georgia (Ga. Laws 1945, p. 294 et. seq., as amended).

- *Public Water System* - a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes:
  1. any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system
  2. any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. A public water system is either a "community water system" or a "noncommunity water system."

- *Raw Water* - water from a source of water supply or a proposed source of water supply which has not received any type of treatment to change the physical, chemical, biological, or radiological quality of the water.

- *rem* - the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system.

- *Sanitary Survey* - an onsite review of the water source, facilities, equipment, treatment, operation and maintenance of a public water system for the purpose of evaluating the adequacy of each for producing and distributing safe drinking water.

- *Service Connection* - the point at which the water distribution main and the water service pipe, metered or unmetered, are connected to serve water to a residence or water customer.

- *Source of Water Supply* - the waters of the State from which raw water is taken into a public water system to be treated and/or distributed.

- *Spring* - a source of water which naturally issues forth for the first time from rock or soil onto the land or into a body of water.

- *Standard Sample* - the aliquot of drinking water that is examined for the presence of coliform bacteria.

- *Storage Tank (Tank)* - any covered structure, such as clearwell, standpipe, reservoir, elevated tank, hydropneumatic tank or other storage facility or combination thereof used to store drinking water.

- *Supplier or Water (Supplier)* - any person who owns or operates a public water system.

- *Surface Waters* - includes any and all rivers, streams, branches, creeks, ponds, tributary streams and drainage basins, natural lakes, artificial reservoirs or impoundments, and groundwater under the direct influence of surface water.

- *Total Trihalomethanes (TTHM)* - the sum of the concentration in milligrams per liter (mg/ L) of the trihalomethane compounds (trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromomethane (bromoform)), rounded to two significant figures.

- *Treatment Technique Requirement* - a requirement which specifies for a contaminant a specific treatment technique(s) known to the Director which leads to a reduction in the level of such contaminant sufficient to comply with the requirements of these rules.

- *Trihalomethane (THM)* - one of the family of organic compounds, named as derivatives of methane, wherein three of the four hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure.

- *Waters or Waters of the State* - includes any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and all other bodies of surface or underground water natural or artificial, of this State.

- *Well* - any excavation that is cored, bored, drilled, jetted, dug, or otherwise constructed for the purpose of locating, testing, or withdrawing groundwater.

SAFE DRINKING WATER ACT

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
All Installations	3-1
Design and Construction	3-2
Source of Water Supply	3-3 through 3-5
Wells	3-6 through 3-8
Springs	3-9
Water Treatment Facilities	3-10 through 3-14
Distribution System	3-15 and 3-16
Storage Tanks	3-17
Disinfection	3-18
Cross Connections	3-19
Public Water Systems Operation	3-20 and 3-21
Record Maintenance	3-22
Primary Standards for Drinking Water - Inorganics	3-23 through 3-30
Primary Standards for Drinking Water - Organics	3-31 through 3-37
Primary Standards for Drinking Water - Turbidity	3-38 through 3-40
Primary Standards for Drinking Water - Microbiological	3-41 through 3-46
Primary Standards for Drinking Water - Radioactivity	3-47
Primary Standards for Drinking Water - Trihalomethanes (THMs)	3-48 through 3-52
Secondary MCLs for Drinking Water	3-53
Lead and Copper in Drinking Water Systems	3-54 through 3-72
Unregulated Contaminants	3-73 through 3-75

SAFE DRINKING WATER ACT

GUIDANCE FOR GEORGIA CHECKLIST USERS
(continued)

Applicability	Refer to Checklist Items:
Public Water Systems - Monitoring and Reporting	3-76 and 3-77
Public Water Systems - Customer Notification	3-78

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
3-1. Installations with water systems that meet specific criteria must meet the requirements of public water systems (Rules for Safe Drinking Water (RSDW), Chapter 391-3-5, Section 391-3-5-.03).	(NOTE: The Division may approve or require different and/or additional requirements that are not specifically included in this protocol.) Determine if the installation has a public water system that meets the following conditions: - provides piped water for human consumption - has at least 15 service connections or regularly serves an average of at least 25 persons daily at least 60 days of the year. Determine if the installation has a public water system that is exempt from this protocol by meeting all of the following criteria: - consists only of distribution and storage facilities and does not have any collection and treatment facilities - obtains all of its water from, but is not owned or operated by, a public water system to which such regulations apply - does not sell water to any person - is not a carrier which conveys passengers in interstate commerce.
DESIGN AND CONSTRUCTION	
3-2. Installations with public water systems must meet design and construction requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.04 and 391-3-5-.05).	Verify that the installation has Division approval for the following: - the source of water supply - the means and methods of treating, purifying, storing and distributing water. Verify that the installation has a current permit from the Division to operate a public water system. Verify that a professional engineer prepares an initial engineering report and a final set of plans and specifications as directed by the Division. Verify that the public water system is not located at any of the following sites: - where there is a significant risk that earthquakes, floods, fires or other disasters could cause a breakdown of the system or a portion thereof - within the floodplain of a 100-yr flood or is lower than any recorded high tide where appropriate records exist.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-2. (continued)	Verify that all products added directly to drinking water for its treatment or introduced indirectly into drinking water through its contact with surfaces of materials or products used for its treatment, storage, transmission, or distribution will not adversely affect drinking water quality and public health and are certified for conformance with standards of the American National Standards Institute/National Sanitation Foundation (ANSI/ NSF).
SOURCE OF WATER SUPPLY	
3-3. Sources of water supply for public water systems must meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.06(a) and (b)).	Verify that water supply sources for all public water systems have the approval of the Division and a valid groundwater or surface water withdrawal permit where applicable.
3-4. Installations must meet specific requirements before the Division will approve surface water or groundwater sources (RSDW, Chapter 391-3-5, Section 391-3-5-.06(c) and (d)).	Verify that raw water samples from the proposed source are collected and submitted to the following tests as determined by the Division: - microbiological analysis - analyses of physical, chemical and radiological parameters. Verify that the results of required tests are submitted to the Division. (NOTE: For drilled wells previously used as a source of public water supply but inactive for three or more years, require tests for raw water samples will be made before reactivation of the wells.) Verify that bathing, water skiing, boating, fishing and other activities in or upon any body of water used as a source of water supply is prohibited. (NOTE: Specific activities, i.e., bathing, fishing, etc., may be permitted by the Division if evidence is presented that the drinking water quality will not be adversely affected by these activities and prior written approval for such activity is obtained from the Division.)
3-5. Installations that have a public water system that uses groundwater sources must, under certain circumstances, meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.06(e)).	Determine if the Division has required the installation to evaluate a groundwater source for the influence of surface water. Verify that the Division is notified if a groundwater source is determined to be under the direct influence of surface water. Verify that, within 18 mo of Division notification, the installation installs filtration treatment and any additional treatment as determined by the Division in accordance with the Water Treatment Facilities section.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
WELLS **3-6.** Installations must construct wells to meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.07(1), (2), (4) through (11), (14), and 391-3-5-.09(n)).	Verify that the installation has approval from the Division to construct a well as a source of water supply for a public water system. Verify that wells are not dug, bored, or jetted without approval from the Division. Verify that the following requirements are met for newly constructed well disinfection: - the well is disinfected by the introduction of a chlorine solution under sufficient pressure to produce a minimum chlorine residual of 50 parts per million (ppm) in 6 hours (h) after such application - the well is pumped until no trace of chlorine remains in the water - samples of well water are submitted to the Division for microbiological analysis after disinfection and pumping - the permanent pump and pumping equipment are disinfected with a chlorine solution. Verify that water from a well is disinfected before being used in a public water system. Verify that a well used as a source of water supply includes the following: - a concrete slab with a minimum thickness of 6 inches (in.) around the well casing and extending at least 2 feet (ft) in all directions, and sloping away, from the casing - a well casing extending at least 12 in. above the concrete slab of the floor - a raw water sampling tap is provided on the well discharge pipe - an access port of not less than 5/8 in. in diameter, with screw cap, for water level measurements (a deep well air line and gage may also be used in conjunction with the access port) - for submersible pump installations, a well casing provided with a sealed cover plat and, when required by the Division, vented by a screened riser pipe so that the screened opening terminated downward at least 12 in. above the top of the casing or ground level. Verify that turbine pump installations include the following: - a concrete block to support the pump motor constructed around the outer well casing and extending at least 12 in. above the concrete slab - the outer casing extending at least 1 in. above the pump motor block - the casing is vented by a screened riser pipe so that the screen opening terminates downward and above any point of back flow of contaminants into the well - the well head and pump base are sealed - use of acceptable turbine oil as prescribed by the pump manufacturer for oil lubricated vertical turbine pumps.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-6. (continued)	Verify that the pumping and water treatment equipment are protected from unauthorized entry and use by an enclosed shelter or fence. Verify that water treatment equipment is enclosed in a weather proof shelter. Verify that the person constructing the well is a licensed water well contractor in the State of Georgia.
3-7. Sites for well location must meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.07(3)).	Verify that wells are located at the highest point possible and/or as far removed and in a direction opposite to the groundwater flow from sources of potential contamination. Verify that wells are located: - at least 50 ft from a septic tank - at least 100 ft from a septic tank absorption field - at least 10 ft from a sewer - at least 1000 ft from a solid waste disposal site - as far removed as possible from all open abandoned wells. Verify that, in areas of sink holes, surveys required by the Division are made to determine the most appropriate location of a well. Verify that adequate protection is provided to prevent submergence of the well casing, pumps and appurtenances for wells located in a floodplain. (NOTE: Variation of the distance from areas of known or probable sources of contamination may be permitted or required by the Division due to topography, local soil or geologic conditions.)
3-8. Installations must meet specific requirements when deepening or reworking existing wells (RSDW, Chapter 391-3-5, Section 391-3-5-.07(12) and (13)).	Verify that deepened wells meet the requirements for approval of newly constructed wells. Verify that rehabilitated or reworked wells meet disinfection requirements (as required for well construction).

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SPRINGS	
3-9. Installations using a spring as a source of water supply for a public water system must meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.08 and 391-3-5-.09(c)).	Verify that springs are protected by an enclosed structure meeting one of the following requirements: - the walls extend down to bedrock - the walls extend into the soil sufficiently to provide for a proper foundation to prevent surface water infiltration. Verify that overflow from the spring's enclosed structure is designed to prevent entrance of contaminants or animals. Verify that the spring is protected from any entry of surface water. Verify that pumping and water treatment facilities are enclosed in shelters that are of weather and vandal-proof construction. Verify that the spring area is secured as specified by the Division to prevent unauthorized entry. Verify that water from a spring is disinfected and retained in a detention tank for a minimum of 30 min.
WATER TREATMENT FACILITIES	
3-10. Installations that have a public water system that uses surface water sources or groundwater sources under the direct influence of a surface water source must use filtration as a treatment technique (RSDW, Chapter 391-3-5, Section 391-3-5-.09(a) and (b)).	Determine if the installation has a public water system that uses surface water sources or groundwater under the direct influence of a surface water source. Verify that all means and methods of treating, purifying and storing water for public water systems are approved by the Division.
3-11. Installations must meet specific requirements for equipment and chemicals used in disinfection (RSDW, Chapter 391-3-5, Section Chapter 391-3-5, Section 391-3-5-.09(c) through (f), (h) through (j), and (o)).	Verify that there is sufficient space for chemical storage. Verify that chemical feed equipment is designed and adequately sized to accurately supply, at all times, the treatment chemicals required. Verify that chemical water treatment equipment is installed in such a manner to prevent backsiphonage or overdosing of the chemicals to the water supply. Verify that chlorination equipment has sufficient feed capacity for the treatment of the raw water and drinking water to maintain a chlorine residual in the drinking water of at least 0.2 ppm.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-11. (continued)	Verify that gas chlorination equipment and cylinders are housed separately from the other treatment facilities and chemicals, and the following requirements are to be met: - cylinders stored or used outdoors are protected from the direct rays of the sun by shading and additionally protected to prevent unauthorized tampering - cylinders are secured from accidental tipping or movement - a chlorine gas mask or self contained gas mask (air pack) is made fully accessible to operators working in the area of gas chlorine equipment - forced air ventilation, placed near floor level, is provided for areas where cylinders are located - ventilation directs fumes away from the entrance of the facility and is activated by an outside switch or automatically when the door is opened - a small bottle of fresh ammonia solution is provided for testing for chlorine gas leaks. Verify that fluoridation equipment and chemicals are placed in a separate facility provided for that purpose. Verify that chemicals and equipment for alternative methods of disinfection (i.e., iodine or ozone treatment) are properly used and stored.
3-12. Installations must provide specific equipment to facilitate sampling and testing procedures (RSDW, Chapter 391-3-5, Section 391-3-5-.09(k) through (m)).	Verify that each water treatment facility has a laboratory and laboratory equipment to perform daily tests to meet the required water treatment operations. Verify that water sampling taps are placed in the water treatment facility. Verify that all surface water treatment plants and all new wells serving public water systems have a metering device to measure the flow of raw or treated water.
3-13. Installations that have a public water system that uses a surface water source or a groundwater source under direct influence of a surface water source must provide treatment of that source (RSDW, Chapter 391-3-5, Section 391-3-5-.09(p)).	Verify that the disinfection treatment meets the following standards: - at least 99.9 percent (3-log) inactivation of *Giardia Lamblia* cysts - at least 99.9 percent (4-log) inactivation of viruses. (NOTE: This standard is to be met between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-14. Installations that have a public water system that uses a surface water source or a groundwater source under direct influence of a surface water source must meet specific requirements by 29 June 1993 (RSDW, Chapter 391-3-5, Section 391-3-5-.09(q)).	Verify that the residual disinfectant concentration of the water entering the distribution system is monitored in one of the following ways:
	- continuously and the lowest value is recorded daily
	- by grab sampling every 4 h for no more than 5 days in the event that continuous monitoring equipment is inoperative
	- by grab sampling in lieu of continuous monitoring if the system serves 3300 or fewer persons on an ongoing basis at the following frequencies each day:
	  - one sample per day for systems serving less than 500 persons
	  - two samples per day for systems serving 501 to 1000 persons
	  - three samples per day for systems serving 1001 to 2500 persons
	  - four samples per day for systems serving 2501 to 3300 persons.
	
	Verify that the residual disinfectant concentration in water entering the distribution system is not less than 0.2 mg/ L for more than 4 h.
	
	(NOTE: For systems using grab sampling, if the concentration ever falls below 0.2 mg/ L, samples should be taken every 4 h until the residual disinfectant concentration is equal to or greater than 0.2 mg/ L.)
	
	Verify that the disinfectant residual in the distribution system is maintained at 0.2 ppm as measured in one of the following ways:
	- at the same points in the distribution system and at the same time as total coliforms are sampled
	- at points other than the total coliform sampling points and approved by the Division for public water systems using both a surface water source or a groundwater source under the direct influence of surface water and a groundwater source.

DISTRIBUTION SYSTEM **3-15.** Water distribution systems at installations must meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.10).	Verify that water distribution systems maintain the following at all times: - the instantaneous demand flow of water required - a pressure of 20 pound (lb)/in.^{2} at each service connection in the distribution system under all conditions of flow. Verify that installations prevent contamination of the drinking water in the distribution system.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-16. Distribution lines and water mains must be constructed to meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.10(2) and, (4) through (10)).	Verify that distribution lines are looped whenever possible. Verify that water lines are not installed in contaminated areas, i.e., sanitary landfill or dump areas. Verify that no water main or pipe passes through or comes into contact with any part of a sewer or sewer manhole. Verify that water distribution mains meet the following requirements: - all newly installed mains and appurtenances are flushed, pressure tested and disinfected - the minimum size water main is 2 in. in nominal diameter. (NOTE: The Division may allow for a departure in sizing of water mains in special circumstances.) Verify that pipes, solders and flux used in the construction or repair of distribution systems meet the following maximum lead levels: - 8.0 percent for pipes and fittings - 0.2 percent for solders and flux. (NOTE: These maximum lead levels do not apply to leaded joints necessary for the repair of cast iron pipes.) Verify that installations identify and report to the Division any lead pipe and/or lead service connections known to be installed in the distribution system.
STORAGE TANKS **3-17.** Water storage tanks must be designed and maintained to meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.11).	Verify that all storage tanks are provided with the following: - a permanent cover - screened vents and openings - overflow pipes - means of draining. Verify that paint used for the interior of storage tanks is approved by the Division. Verify that installations maintain storage tanks to prevent contamination of drinking water by infiltration or other means. Verify that installations receive approval from the Division prior to starting repairs or renovations to existing storage tanks that may effect the quality of the drinking water. Verify that buried or semi-buried storage tanks have the ground surface sloping away from the facility.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-17. (continued)	Verify that hydropneumatic pressure tanks are provided with devices for maintaining the air-water volume at the designed water level and working pressures.
DISINFECTION	
3-18. Installations must meet specific requirements for the disinfection of public water system facilities (RSDW, Chapter 391-3-5, Section 391-3-5-.12).	Verify that all components of a public water system are disinfected prior to service according to the following Standards of American Water Works Association (AWWA): - AWWA Standard 651 for water mains - AWWA Standard 652 for storage facilities - AWWA Standard 653 for water treatment plants - AWWA Standard 654 for wells.
CROSS CONNECTIONS	
3-19. Installations must insure that public water systems are not contaminated through cross connections (RSDW, Chapter 391-3-5, Section 391-3-5-.13).	Determine if installations have public water systems that are connected in any way with sources that may allow back-flow or backsiphonage of any substance other than safe drinking water. Verify that any plans requested and approved by the Division for the elimination and prevention of all cross-connections are implemented. Verify that procedures for back-flow and backsiphonage prevention and cross-connection control conform to those recommended by the AWWA, Manual 14, and the USEPA Cross-Connection Manual.
PUBLIC WATER SYSTEMS OPERATION	
3-20. Installations with public water systems must meet operational requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.14(1) through (7) and 391-3-5-.16).	(NOTE: All analyses required under this section are to be conducted in accordance with 40 CFR 141.) Verify that installations meet the following requirements for chlorine disinfection of water: - continuously chlorinate - maintain a free chlorine residual of not less than 0.2 ppm in the distribution system. (NOTE: The Division may approve alternate disinfection treatment chlorination levels and/or methods of measurement.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-20. (continued)	Verify that all potable water supplies in incorporated communities and counties lying wholly within Georgia are fluoridated in compliance with the Act. Verify that installations with a fluoridated public water system meets the following requirements: - drinking water is sampled and analyzed for fluoride concentration daily - daily records of analytical results are maintained - a copy of results are submitted to the Division in accordance with Public Water Systems - Monitoring and Reporting. Verify that installations having a surface water source or a groundwater source under the direct influence of surface water have a certified operator on duty at all times when the water plant is in operation. Verify that installations having only groundwater sources have a trained operator or, when required, a certified operator available at all times. Verify that installations maintain records of the operation of the water system including at least the following reports: - results of the performance of daily tests pertinent to the control of water treatment - tests performed in the water distribution system.
3-21. Installations must meet specific requirements for microbiological analy (RSDW, Chapter 391-د-, Section 391-3-5-.14(8) through (10)).	Determine if installations have any of the following water systems: - a community water system having a surface water source with water treatment facilities - a public water system having only a groundwater source or only a water distribution system and serving a population of more than 12,900. Verify that installations have the services of a microbiological laboratory approved by the Division to perform the tests necessary for compliance with the maximum microbiological contaminant levels. Verify that installations meet the following requirements for microbiological testing: - drinking water samples are collected and analyzed in accordance with the minimum number specified in Primary Standards for Drinking Water - Microbiological - a monthly microbiological summary of the number of samples analyzed and the results are submitted to the Division in accordance with Public Water Systems - Monitoring and Reporting.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-21. (continued)	Verify that routine collection of drinking water samples for microbiological analysis is as follows: - the minimum number of routine samples per month are collected in accordance with Appendix 3-2 - when three or more samples per month are required, they are collected at the treatment plant and at various points in the distribution that are representative of the drinking water - when only one or two samples per month are required, they are collected at various points in the distribution system that are representative of the drinking water.
RECORD MAINTENANCE	
3-22. Installations operating a public water system must meet record-keeping requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.15).	Verify that the following records are retained at the water system treatment plant or a convenient location near the premises: - bacteriological analyses, maintained for 5 yr - chemical analyses, maintained for 10 yr - corrective actions for primary drinking water regulation violations, maintained for 3 yr after the last corrective action taken regarding the violation - copies of any written reports, summaries or communications relating to sanitary surveys done by the system, private consultant and state or Federal agencies, maintained for 10 yr after survey completion - records of variances or exemptions, maintained for 5 yr following expirations - for any system subject to the lead and copper requirements, original records of all sampling data, analyses, reports, surveys, letters, evaluations, schedules, Division determinations, and any other information required in Lead and Copper in Drinking Water and Public Water Systems - Monitoring and Reporting, maintained for 12 yr.
PRIMARY STANDARDS FOR DRINKING WATER - INORGANICS	
3-23. Installations with public water systems must meet specific requirements for maximum contaminant levels (MCLs) of inorganic chemicals (RSDW, Chapter 391-3-5, Section 391-3-5-.18(1)).	Verify that public water systems do not exceed the MCLs for inorganic chemicals in Appendix 3-3. (NOTE: All analyses conducted to determine compliance with this rule will be in accordance with 40 CFR 141.23(k)).

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-24. Installations must meet MCLs for inorganic chemicals by using analytical results obtained at each sampling point (RSDW, Chapter 391-3-5, Section 391-3-5-.21(12)).	Verify that systems are identified as out of compliance with the MCLs for inorganics (other than arsenic, nitrate, and nitrite) in any of the following cases:
	- for systems monitoring at a frequency greater than annual, in the following cases:
	  - when the running annual average at any sampling point is greater than the MCL
	  - immediately, when one sample would cause the annual average to be exceeded.
	- for systems monitoring annually, or less frequently, when the level of a contaminant at any sampling point is greater than the MCL.
	
	Verify that systems are identified as out of compliance with the MCLs for nitrate and nitrite if, after an initial sample indicates an excess, a confirmation sample is taken and the average of the two samples indicates an excess.

3-25. Installations must meet specific monitoring requirements for inorganics (other than arsenic) beginning in the compliance period starting 1 January 1993 (RSDW, Chapter 391-3-5, Section 391-3-5-.21(4)).	Verify that public water systems using the following types of water sources monitor for inorganics at the following sampling points: - groundwater systems, one sample at every entry point to the distribution system which is representative of each well after treatment - surface water systems (including systems with a combination of surface and ground sources), one sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment. (NOTE: If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions, when the water is representative of all sources. The Division may reduce the total number of samples which must be analyzed by allowing the use of compositing. Further, confirmation samples will be taken as required by and in accordance with 40 CFR 141.23(f) and as approved by the Division.)
3-26. Installations must meet specific monitoring frequencies for inorganics (other than arsenic, nitrates, and nitrites) beginning in the compliance period starting 1 January 1993 (RSDW, Chapter 391-3-5, Sections 391-3-5-.21(5)(a) and, (e) through (g), and 391-3-5-.21(6)(a)).	(NOTE: Unless otherwise stated, a "compliance period" is equivalent to 3 yr.) Verify that monitoring frequencies for barium, cadmium, chromium, fluoride, mercury, and selenium are conducted as follows: - for groundwater systems, one sample at each sampling point during each compliance period - for surface water systems, one sample annually at each sampling point. Verify that installations monitor for asbestos during the first compliance period of each 9-yr compliance cycle.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-26. (continued)	Verify that asbestos monitoring is conducted as follows depending on the source of asbestos contamination: - for contamination due solely to corrosion of asbestos-cement pipe or a combination of source water and asbestos-cement pipe, one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur - for contamination due solely to source water, monitoring should be performed in accordance with source requirements indicated in this section.
3-27. Installations must meet specific monitoring requirements for inorganics (other than arsenic, nitrates, and nitrites) when MCLs have been exceeded (RSDW, Chapter 391-3-5, Sections 391-3-5-.21(5)(h) and (i), and 391-3-5-.21 (6)(g) and (h)).	Verify that systems exceeding MCLs begin quarterly monitoring in the next quarter after the violation occurs. Verify that systems decrease quarterly monitoring only under the following conditions: - a groundwater system has taken a minimum of two quarterly samples - a surface water system, or combined surface/groundwater system, has taken a minimum of four quarterly samples - the Division has approved the decrease.
3-28. Installations with public water systems must meet sampling and analytical requirements for compliance with the MCL for nitrate (RSDW, Chapter 391-3-5, Section 391-3-5-.21(7)).	Verify that community and nontransient, noncommunity water systems using the following types of water sources complete analyses for nitrates at the following intervals: - surface water, quarterly intervals - groundwater, yearly intervals. Verify that community and nontransient, noncommunity water systems using surface water sources reduce monitoring frequency to yearly intervals only if the following requirements are met: - all analytic results from four consecutive quarters are less than 50 percent of the MCL - the Division approves of the reduction. Verify that community and nontransient, noncommunity water systems using the following types of water sources meet the following requirements whenever one sample is taken in which the concentration is greater than or equal to 50 percent of the MCL for nitrates: - groundwater sources, initiate repeat monitoring at quarterly intervals for at least 1 yr - surface sources, returns to monitoring at quarterly intervals.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-28. (continued)	Verify that transient noncommunity water systems monitor annually for nitrates. (NOTE: Systems which are monitoring annually are to take subsequent samples during the quarter(s) which previously resulted in the highest analytical result.)
3-29. Installations with public water systems must meet sampling and analytical requirements for compliance with the MCL for nitrite (RSDW, Chapter 391-3-5, Section 391-3-5-.21(8)).	Verify that all public water systems take one sample at each sampling point in the compliance period beginning 1 January 1993 and ending 31 December 1995. Verify that installations monitor at a frequency specified by the Division if the initial sample indicates less than 50 percent of the MCL for nitrite. Verify that installations monitor quarterly for at least 1 yr and until the Division determines otherwise following any one sample that indicates a level of nitrite greater than or equal to 50 percent of the MCL. (NOTE: Systems which are monitoring annually are to take subsequent samples during the quarter(s) which previously resulted in the highest analytical result.)

3-30. Installations must meet specific sampling and analytical requirements for arsenic (RSDW, Chapter 391-3-5, Section 391-3-5-.21(3)).	Verify that community water systems using the following types of water sources complete analyses for arsenic at the following intervals:
	
	- surface water, yearly intervals
	- groundwater only, 3-yr intervals.
	
	Verify that when the MCL appears to have been exceeded, the installation takes the following actions:
	
	- reports to the Division in writing within 7 days
	- initiates three additional analyses at the same sampling point within 1 mo.
	
	Verify that, when the average of four analyses indicate arsenic to be in excess of MCL, the installation takes the following actions:
	
	- reports to the Division in accordance with Public Water Systems - Monitoring and Reporting
	- notifies the public in accordance with Public Water Systems - Customer Notification
	- continues to monitor at a frequency designated by the Division until:
	  - the MCL has not been exceeded in two successive samples
	  - a monitoring schedule as a condition to a permit, variance, exception or enforcement action becomes effective.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
PRIMARY STANDARDS FOR DRINKING WATER - ORGANICS	
3-31. Installations must meet specific requirements for MCLs of organic chemical levels (RSDW, Chapter 391-3-5, Section 391-3-5-.18(2)).	Verify that installations with community water systems and nontransient, noncommunity water systems do not exceed the MCLs for organic chemicals in Appendix 3-4. (NOTE: The best technology, treatment technique, or other means available for achieving compliance with this rule will be in accordance with 40 CFR 141.61(b)).
3-32. Installations must monitor for organics at specific points in the public water system (RSDW, Chapter 391-3-5, Sections 391-3-5-.22(5)(a) through (c) and 391-3-5-.22(6)(a) through (c)).	Verify that public water systems using the following types of water sources monitor for organics at the following sampling points: - groundwater systems, one sample at every entry point to the distribution system which is representative of each well after treatment - surface water systems (including systems with a combination of surface and ground sources), one sample at every entry point to the distribution system after any application of treatment or at a point in the system determined to be more representative of each source or treatment plant.
3-33. Installations must meet specific initial monitoring and monitoring frequency requirements for organics in the compliance period beginning 1 January 1993 (RSDW, Chapter 391-3-5, Sections 391-3-5-.22(5)(d) through (i), and (p), and 391-3-5 -.22(6)(d), (e), and (m)).	Verify that each community and nontransient, noncommunity water system takes four consecutive quarterly samples for each organic contaminant during each compliance period unless the Division provides other measures for meeting initial sampling. Verify that systems serving more than 3300 persons which do not detect pesticide or polychlorinated biphenyl contamination in the initial compliance period take a minimum of two quarterly samples in 1 yr during each repeat compliance period. Verify that systems serving less than or equal to 3300 persons which do not detect pesticide or polychlorinated biphenyl contamination in the initial compliance period take a minimum of one sample during each repeat compliance period. Verify that systems take samples at a minimum of once every year for volatile organic chemical (VOC) contamination after initial monitoring does not detect VOC contamination. Verify that the frequency of monitoring is reduced or waived only with approval by the Division.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-34. Installations must meet MCLs for organic chemicals by using analytical results obtained at each sampling point (RSDW, Chapter 391-3-5, Sections 391-3-5-.22 (5)(l) through (n) and 391-3-5-.22 (6)(i) through (k)).	Verify that systems are identified as out of compliance with the MCLs for organics in any of the following cases:
	- for systems monitoring at a frequency greater than annual, in one of the following cases:
	  - when the running annual average at any sampling point is greater than the MCL
	  - immediately, when one sample would cause the annual average to be exceeded
	- for systems monitoring annually, or less frequently, in one of the following cases:
	  - when the level of a contaminant at any sampling point is greater than the MCL
	  - if a confirmation sample is taken, when the average of the two samples is greater than the MCL.

3-35. Installations must meet specific monitoring frequency requirements when organics are detected (RSDW, Chapter 391-3-5, Sections 391-3-5-.22(5)(j)(1) through (4), 391-3-5-.22(5)(k), and 391-3-5-.22(6)(g) and (h)).	Determine if any organic chemicals of the following types are detected at the following levels: - VOCs (other than vinyl chloride), exceeding 0.0005 mg/ L in any sample - pesticides and PCBs, detection limits established in 40 CFR 141.24(h)(18). Verify that systems detecting levels of organic contaminants begin quarterly monitoring at each sampling point which resulted in a detection. Verify that systems that are monitoring annually take subsequent samples during the quarter(s) which previously resulted in the highest analytical result. Verify that subsequent monitoring analyzes for all related contaminants when one or more related contaminants are detected (e.g., aldicarb, aldicarb sulfone, aldicarb sulfoxide and heptachlor, heptachlor epoxide).
3-36. Installations with public water systems that use groundwater and have detected certain VOCs must meet additional requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.22(5)(j)(5)).	Determine if any of the following VOCs have been detected in a community water system using groundwater: - trichloroethylene - tetrachloroethylene - 1,2-dichloroethane - 1,1,1-trichloroethane - cis-1,2,-dichloroethylene - trans-1,2-dichloroethylene - 1,1-dichloroethylene. Verify that analysis for vinyl chloride is done quarterly at each distribution or entry point at which one or more of the above-listed VOCs were found. Verify that surface water systems monitor for vinyl chloride as specified by the Division.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-37. Installations must meet specific sampling and analytical requirements for endrin (RSDW, Chapter 391-3-5, Section 391-3-5-.22(1) through (3)).	Verify that community water systems using the following types of water sources complete analyses at the following intervals:
	
	- surface water, at least at 3-yr intervals as determined by the Director and during the period of the year when contamination by pesticides is most likely to occur
	- groundwater only, at intervals determined by the Director.
	
	Verify that when the MCL appears to have been exceeded, the installation takes the following actions:
	
	- reports to the Division in writing within 7 days
	- initiates three additional analyses at the same sampling point within 1 mo.
	
	Verify that, when the average of four analyses indicate endrin to be in excess of the MCL, the installation takes the following actions:
	
	- reports to the Division in accordance with Public Water Systems - Monitoring and Response
	- notifies the public in accordance with Public Water Systems - Customer Notification
	- continues to monitor at a frequency designated by the Division until:
	  - the MCL has not been exceeded in two successive samples
	  - a monitoring schedule as a condition to a permit, variance, exception or enforcement action becomes effective.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
PRIMARY STANDARDS FOR DRINKING WATER - TURBIDITY	
3-38. Installations with public water systems that are required to monitor for turbidity must meet sampling and analytical requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.20(1) and (2)).	Verify that installations with community and noncommunity water systems sample at representative distribution system entry points at least once a day to determine compliance with turbidity requirements. Verify that if a turbidity analysis indicates an exceeded level, the following actions are taken: - repeat sampling for confirmation is done, preferably within 1 h - the Division is notified within 48 h if the repeat sample exceeds the MCL for turbidity - repeat sample is used to calculate the monthly average. Verify that the installation takes the following actions if the public water system has exceeded the turbidity level based on a monthly average, or if the average of two samples taken on consecutive days exceeds 5 TU: - reports to the Division in conformance with Public Water Systems - Monitoring and Reporting - meets requirements of Public Water Systems - Customer Notification.

3-39. Installations must meet specific turbidity treatment technique requirements (MCLs) on and after 29 June 1993 (RSDW, Chapter 391-3-5, Section 391-3-5-.20(4)).	Determine if the installation has one of the following water systems using surface water sources or groundwater sources under the direct influence of surface water in whole or in part:
	
	- a community water system
	- a noncommunity water system.
	
	Verify that installations do not exceed the following turbidity levels in drinking water:
	
	- 0.5 TU, in at least 95 percent of the monthly measurements
	- up to 1.0 TU, based on monthly measurements, if the installation can demonstrate that the higher turbidity does not do any of the following:
	  - interfere with disinfection
	  - prevent maintenance of an effective disinfectant agent throughout the distribution system
	  - interfere with microbiological determinations.
	- 2 TU at any time.
	
	(NOTE: The Division may allow higher turbidity levels for slow sand filtration, diatomaceous earth filtration, or other filtration technologies in accordance with 40 CFR 141.73.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-40. Installations with public water systems that are required to monitor for turbidity must meet sampling and analytical requirements after 29 June 1993 (RSDW, Chapter 391-3-5, Section 391-3-5-.20(1) and (3)).	Verify that installations with community and noncommunity water systems take and analyze representative samples of filtered water at least every 4 h when the plant is in operation to determine compliance with turbidity requirements. (NOTE: The Division may, in some cases, approve reductions in the turbidity sampling frequency.) Verify that if a turbidity analysis indicates an exceeded MCL, the following actions are taken: - repeat sampling for confirmation is done, preferably within 1 h - the Division is notified within 48 h or at the end of the next business day (whichever is earlier) if the repeat sample exceeds the MCL for turbidity - repeat sample is used to calculate the monthly average. Verify that the installation takes the following actions if the public water system has exceeded the MCL for turbidity based on a monthly average, or if the maximum measured level exceeds 2 TU: - reports to the Division in conformance with Public Water Systems - Monitoring and Reporting - meets requirements of Public Water Systems - Customer Notification.
PRIMARY STANDARDS FOR DRINKING WATER - MICROBIOLOGICAL	
3-41. Installations with public water systems must meet monitoring standards and levels for total coliforms (RSDW, Chapter 391-3-5, Sections 391-3-5-.18(4)(a) and (c) and 391-3-5-.23(1)(a)).	Verify that installations do not exceed the following MCLs for total coliforms: - more than 5 percent of the samples collected during a month are total coliform-positive for a system collecting at least 40 samples per month - more than one sample is total coliform-positive for a system collecting fewer than 40 samples per month. Verify that public water systems determine compliance with the MCL for total coliforms for each month that monitoring is required. Verify that total coliform samples are collected at representative sites and at regular times in accordance with a written sample siting plan.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-42. Installations must meet monitoring frequency requirements for total coliforms (RSDW, Chapter 391-3-5, Section 391-3-5-.23(1)(b) through (e)).	Verify that the minimum number of routine samples are taken per month by the supplier of water to a community water system as set forth in Appendix 3-2.
	
	Verify that noncommunity water systems monitor for total coliforms as follows:
	
	- each calendar quarter that the system provides water to the public for systems using groundwater only and serving 1000 or fewer persons
	- at the same frequency as a like-sized community water system in Appendix 3-2 for the following systems:
	  - systems using groundwater only and serving more than 1000 persons during any month
	  - systems using surface water in total or in part
	  - systems using groundwater under the direct influence of surface water (beginning 6 mo after the surface water influence is determined).
	
	Verify that, except for systems using only groundwater and serving 4900 persons or fewer, samples are collected at regular time intervals throughout the month.
	
	(NOTE: Special purpose samples, i.e. taken for purposes other than routine or repeat monitoring, cannot be used to determine compliance with the MCL for total coliforms.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-43. Installations with public water systems that have a total coliform-positive sample must meet repeat monitoring standards (RSDW, Chapter 391-3-5, Section 391-3-5-.23(2)(a) through (d), and (f)).	Verify that if a routine sample is total coliform-positive, a set of repeat samples is collected within 24 h of the result notification. (NOTE: The Division may extend the 24-h limit for repeat samples.) Verify that systems collecting more than one routine sample a month collect no fewer than three repeat samples for each total coliform-positive sample. Verify that systems collecting one routine sample or fewer a month collect no fewer than four repeat samples for each total coliform-positive sample. Verify that the system collects repeat samples from the following: - at least one repeat sample from the original sampling tap where the positive sample was taken - at least one repeat sample at a tap within five service connections upstream of original sampling site - at least one repeat sample at a tap within five service connections downstream of original sampling site. (NOTE: If a positive sample is at the distribution system end, or one away from the end, the Division may waive the requirement to collect at least one repeat sample upstream or downstream of the original sampling site.) Verify that all repeat samples are taken on the same day. (NOTE: The Division may allow a system with a single service connection to collect the required set of repeat samples over a 4-day period.) Verify that if any repeat samples are total coliform-positive, an additional set of repeat samples is collected within 24 h. Verify that sets of repeat samples are collected until one of the following conditions occurs: - total coliforms are not detected in a complete set - the system determines the MCL for total coliforms has been exceeded and notifies the Division. (NOTE: If a system collects a routine sample and, before it learns the results of the analysis of that sample, it collects another routine sample from within five adjacent service connections of the original sample, and the initial sample analysis found total coliforms, then the system may count the subsequent sample as a repeat sample.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-44. Installations with public water systems collecting fewer than five routine samples a month must meet certain requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.23(2)(e) and (4)).	Verify that if there is one or more total coliform-positive samples, the system collects at least five routine samples during the next month of service to the public. Verify that the system undergoes an initial sanitary survey: - by 29 June 1994, for community water systems - by 29 June 1999, for noncommunity water systems. Verify that public water systems undergo another sanitary survey every 5 yr. (NOTE: Noncommunity water systems using only protected and disinfected groundwater, as defined by the Division, must undergo subsequent sanitary surveys at least every 10 yr.)
3-45. Installations with public water systems must, under certain circumstances, meet additional requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.23(2)(g) and (3)).	Verify that results of all routine and repeat samples not invalidated by the Division are included in determining compliance with the MCL for total coliforms. Verify that if a laboratory invalidates a sample because of interference, the system collects another sample from the same location every 24 h until it obtains a valid result.
3-46. Installations with public water systems must meet Division and public notification standards when the MCL for total coliforms is exceeded (RSDW, Chapter 391-3-5, Sections 391-3-5-.18(4)(b) and 391-3-5-.23(7)).	Verify that if any of the following positive samples occur, the water system meets requirements in Public Water Systems - Customer Notification for acute risks to health violations: - fecal coliform-positive repeat sample - *E. coli*-positive repeat sample - any total colifrom-positive repeat sample following a fecal coliform-positive or *E. coli*-positive routine sample. Verify that if fecal coliforms or *E. coli* are present, the system notifies the Division by the end of the day, or if the Division office is closed, the end of the next business day. Verify that public water systems exceeding the MCL for total coliforms meet the following requirements: - report the violation to the Division by the end of the next business day - Public Water Systems - Customer Notification requirements. Verify that public water systems failing to comply with coliform monitoring and sanitary survey requirements report the monitoring violation to the Division within 10 days of discovery of the violation and meet Public Water Systems - Customer Notification requirements.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
PRIMARY STANDARDS FOR DRINKING WATER - RADIOACTIVITY	
3-47. Installations must meet specific requirements for MCLs of radioactive contaminants (RSDW, Chapter 391-3-5, Section 391-3-5-.18(5)).	Verify that installations do not exceed the MCLs for radioactivity in Appendix 3-5.
PRIMARY STANDARDS FOR DRINKING WATER - TRIHALOMETHANES (THMs)	
3-48. Installations with community water systems must meet sampling standards for THMs (RSDW, Chapter 391-3-5, Sections 391-3-5-.24(1)(a) and (b), 391-3-5-.24(2)(i), and 391-3-5.18(6)).	(NOTE: Sampling and analyses made pursuant to this rule shall be conducted in accordance with 40 CFR 141.30.) Determine if the installation operates a community water system serving 10,000 or more persons and which adds a disinfectant (oxidant) to the water during the drinking water treatment process. Verify that the installation tests for total THMs. Verify that the minimum number of samples taken is based on the number of system treatment plants. (NOTE: Multiple wells drawing raw water from a single aquifer may be considered one treatment plant for determining the minimum number of samples.) Verify that all samples taken within an established frequency are collected within a 24-h period. Verify that all community water systems using surface or groundwater perform analyses for THMs at quarterly intervals on at least four water samples for each system treatment plant. Verify that at least 25 percent of the samples are taken from distribution system locations reflecting the maximum residence time of the water in the system, with the remaining 75 percent taken at representative locations.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-49. Installations with community water systems must meet reporting and notification standards for total THMs (RSDW, Chapter 391-3-5, Section 391-3-5-.24(1)(b), (c) and (h)).	Verify that the results of all analyses each quarter are averaged and reported to the Division within 30 days of receipt. Verify that all samples collected are used in the average's computation unless the sample is invalidated for technical reasons. Verify that if the results of any analysis exceeds the MCL of 0.10 mg/ L for total THMs, the supplier of water takes the following actions: - reports to the Division within 7 days - initiates three additional analyses within 1 mo. Verify that if the running annual average of quarterly samples exceeds the MCL for total THMs, the supplier: - reports to the Division in accordance with Public Water Systems - Monitoring and Reporting - notifies the public in accordance with Public Water Systems - Customer Notification. Verify that community water systems that have exceeded the MCL for total THMs monitor at a frequency set by the Division until another monitoring schedule becomes effective.
3-50. Installations with water systems that have a Division approved reduced monitoring frequency for total THMs must meet monitoring standards (RSDW, Chapter 391-3-5, Section 391-3-5-.24(2)(d) and (e)).	Verify that sampling for total THMs is done quarterly at a point in the distribution system reflecting the maximum residence time of water in the system. Verify that water systems perform one check sample promptly after the results from any analysis exceeds the MCL for total THMs. Verify that water systems return to the nonreduced monitoring frequency for at least 1 yr in either of the following cases: - the check sample confirms an exceeded MCL for total THMs - the system makes any significant change to its source of water or treatment program.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-51. Installations with community water systems using only groundwater that have a Division approved reduced monitoring frequency for maximum total THMs must meet specific monitoring standards (RSDW, Chapter 391-3-5, Section 391-3-5-.24(f)).	Verify that sampling for maximum total THM potential is done at least once per year for every treatment plant used by the system taken at a point in the distribution system reflecting maximum residence time of water in the system. Verify that the results of all analyses are reported to the Division within 30 days of receipt by the system. Verify that all samples collected are used to determine compliance. Verify that water systems return to the nonreduced monitoring frequency for at least 1 yr in the following cases: - the results from any analysis exceeds the MCL for total THMs and at least one check sample taken promptly after such results are received confirms the excess - the system makes any significant change to its source of water or treatment program and an additional analysis indicates an excess of the MCL for total THMs. (NOTE: The monitoring frequencies may be increased by the Department.)
3-52. Installations planning to modify existing treatment processes must meet specific requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.24(2)(j)).	Verify that community water systems planning to modify existing treatment processes in order to comply with total THMs regulations submit a detailed plan for Division approval and must comply with the provisions of the approved plan.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SECONDARY MCLs FOR DRINKING WATER	
3-53. Installations with public water systems must meet secondary drinking water standards (RSDW, Chapter 391-3-5, Section 391-3-5-.19).	Verify that drinking water does not contain any contaminant which will adversely affect the odor or appearance of the drinking water. Verify that public water systems do not exceed the MCLs for secondary drinking water contaminants in Appendix 3-6. Verify that analysis required to determine secondary MCLs is conducted in accordance with recommendations in "Standard Methods of Examination of Water and Wastewater" as published by the American Public Health Association, or as otherwise required by the Director. Verify that installations collect drinking water samples and submit them to an approved laboratory in accordance with requirements made by the Director.
LEAD AND COPPER IN DRINKING WATER SYSTEMS	
3-54. Community water systems and nontransient, noncommunity water systems must meet specific standards for lead and copper action levels (RSDW, Chapter 391-3-5, Section 391-3-5-.25(1)).	Verify that the concentration of lead does not exceed 0.015 mg/ L in more than 10 percent of tap water samples collected during any monitoring period. Verify that the concentration of copper does not exceed 1.3 mg/ L in more than 10 percent of tap water samples collected during any monitoring period.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-55. Installations must meet specific corrosion control requirements depending on the size of the water system (RSDW, Chapter 391-3-5, Section 391-3-5-.25(2) and (3)).	Determine if the installation operates any of the following water systems deemed to have optimized corrosion control and are exempt from further corrosion control requirements: - any system demonstrating to the satisfaction of the Division that it has conducted activities equivalent to the required corrosion control - any system submitting results of tap water monitoring and source water monitoring that demonstrate for two consecutive monitoring periods that the difference between the 90th percentile tap water lead level and the highest source water lead concentration is less than 0.005 mg/ L - a water system serving less than 50,001 persons, meeting the lead and copper action levels during each of two consecutive 6-mo monitoring periods. Verify that all nonexempt water systems meet the treatment steps and deadlines in accordance with 40 CFR 141.81(d) and (e). Verify that each system completes the corrosion control treatment requirements in accordance with 40 CFR 141.82 and as approved by the Division. (NOTE: Any system serving less than 50,001 persons that is required to complete the corrosion control steps because it exceeded the lead or copper action level may cease completing the treatment steps whenever the system meets both action levels during each of two consecutive monitoring periods and submits the results to the Division. However, if any such water system exceeds the lead or copper action level during any monitoring period thereafter, the system shall recommence completion of the applicable treatment steps, beginning with the first treatment step which was not previously completed in its entirety.)

COMPLIANCE CATEGOR SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-56. Installations must meet specific deadlines and treatment requirements for source water (RSDW 391-3-5-.25(4)).	Verify that systems exceeding the lead or copper action level take the following actions:
	- complete lead and copper source water monitoring
	- within 6 mo after an excess, make a treatment recommendation in writing to the Division including one of the following:
	  - recommend the installation and operation of an approved source water treatment (i.e., ion exchange, reverse osmosis, lime softening or coagulation/filtration)
	  - recommend that no treatment be installed based upon a demonstration that source water treatment is necessary to minimize lead and copper levels at users' taps.
	
	Verify that the installation takes the following steps if the Division requires installation of source water treatment:
	- source water treatment is installed and operating within 24 mo
	- follow-up tap water monitoring and source water monitoring are completed within 36 mo.
	
	Verify that, to remain in compliance with this requirement, each water system maintains lead and copper levels below the maximum permissible concentrations designated by the Division at each sampling point monitored.
	
	Verify that each water system continues source water monitoring.

3-57. Installations must meet lead service line replacement requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.25(5)).	Verify that installations replace lead service lines in accordance with the conditions in 40 CFR 141.84.
3-58. Installations must meet public educational and supplemental monitoring requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.25(6)).	Verify that when a water system exceeds the lead action level based on tap water samples, public education programs are implemented in accordance with 40 CFR 141.85.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-59. Installations must monitor for lead and copper in tap water at specific sampling locations (RSDW, Chapter 391-3-5, Section 391-3-5-.25(7)(a)).	Verify that each water system completes a materials evaluation of its distribution system by the date of the first monitoring period to identify a pool of potential sampling sites sufficiently large enough to collect the number of samples required in Appendix 3-7. Verify that sampling sites drawn from the pool of potential sites does not include faucets that have point-of-use or point-of-entry treatment devices designed to remove inorganic contaminants. Verify that the sampling sites selected for a community water system's sampling pool ("tier 1 sampling sites") consist of single family structures that meet at least one of the following criteria: - contain copper pipes with lead solder installed after 1982 or contain lead pipes - are served by a lead service line. (NOTE: When multiple-family residences comprise at least 20 percent of the structures served by a water system, the system may include these types of structures in its sampling pool.) Verify that community systems with insufficient tier 1 sampling sites complete the sampling pool with "tier 2 sampling sites" consisting of buildings (including multiple-family residences) meeting at least one of the following criteria: - contain copper pipes with lead solder installed after 1982 or contain lead pipes - are served by a lead service line. Verify that a community water system with insufficient tier 1 and tier 2 sampling sites completes its sampling pool with "tier 3 sampling sites" consisting of single family structures that contain copper pipes with lead solder installed before 1983. Verify that tier 1 sampling sites selected for nontransient noncommunity water systems consist of buildings meeting at least one of the following criteria: - contain copper pipes with lead solder installed after 1982 or contain lead pipes - are served by a lead service line. Verify that nontransient noncommunity water systems with insufficient tier 1 sites complete the sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. Verify that any installation that cannot meet the required number of sampling sites identified in Appendix 3-7 with tier 1 sites indicates in writing to the Division the reasons for this shortage of primary sampling sites.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-59. (continued)	Verify that any water system whose distribution system contains lead service lines draws the following number of samples from the sites specified: - 50 percent of the samples it collects during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder - 50 percent of those samples from sites served by a lead service line. Verify that a water system that cannot identify a sufficient number of sampling sites served by a lead service line demonstrates in a letter submitted to the Division why the system was unable to locate a sufficient number of sites. Verify that such a water system shall collect lead service line samples from all of the sites identified as being served by such lines.
3-60. Systems must meet requirements for sample collection methods when monitoring for lead and copper in tap water (RSDW, Chapter 391-3-5, Section 391-3-5-.25(7)(b)).	Verify that tap samples collected for lead and copper (other than lead service line samples) are first draw samples meeting the following criteria: - 1 L in volume - have stood motionless in the plumbing system of each sampling site for at least 6 h - for residential housing, drawn from the cold-water kitchen tap or bathroom sink tap - for nonresidential buildings, drawn from an interior tap from which water is typically drawn for consumption. Verify that service line samples are 1 L in volume, have stood motionless in the lead service line for at least 6 h, and are drawn in one of the following ways: - at the tap after flushing the volume of water between the tap and the lead service line (calculate the volume of water based on the interior diameter and length of the pipe between the tap and the service line) - tapping directly into the lead service line - if the sampling site is a building constructed as a single-family residence, allowing the water to run until there is a significant change in temperature that would be indicative of water that has been standing in the lead service line. Verify that water systems collect each first draw sample at one of the following sites: - the same sampling site from which it collected a previous sample - if entry to the original sampling site is impossible, at another sampling site in the sampling pool that meets the same targeting criteria and is within reasonable proximity of the original site.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-61. Installations must meet specific requirements for the number of sites and samples required during tap water monitoring (RSDW, Chapter 391-3-5, Section 391-3-5-25(7)(c)).	Verify that water systems collect at least one sample during each monitoring period from the number of sites listed in Appendix 3-7 under "standard monitoring." (NOTE: A system conducting reduced monitoring may collect one sample from the number of sites listed in Appendix 3-7 under "Reduced Monitoring" during each monitoring period.)

3-62. Installations must meet specific requirements for initial tap sampling and monitoring after the installation of corrosion control and source water treatment (RSDW, Chapter 391-3-5, Section 391-3-5-25(7)(d)1 through 3).	Verify that systems serving more than 50,000 persons monitor during two consecutive 6-mo periods.
	
	Verify that systems serving less than 50,001 persons monitor during each 6-mo monitoring period until:
	
	- the system exceeds the lead or copper action level and is required to implement corrosion control treatment requirements and subsequent monitoring requirements
	- the system meets the lead or copper action levels during two consecutive 6-mo monitoring periods and may reduce monitoring.
	
	Verify that water systems monitor during two consecutive 6-mo periods after installation of corrosion control and source water treatment according to the following schedule:
	
	- beginning on 1 January 1998, for systems that install optimal corrosion control treatment and serve more than 50,000 persons
	- within 36 mo after the new treatment is installed for the following systems:
	  - those installing optimal corrosion control treatment and serving less than 50,001 persons
	  - those installing source water treatment.
	
	(NOTE: After the Division specifies the values for water quality control parameters, the system is to monitor during each subsequent 6-mo monitoring period, with the first monitoring period to begin on the date the Division specifies the optimal values.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-63. Installations must meet specific requirements for reduced monitoring for lead and copper in tap water (RSDW, Chapter 391-3-5, Section 391-3-5-.25(7)(d)4).	Verify that systems serving less than 50,001 persons perform the following only if lead and copper action levels are met during each of two consecutive 6-mo monitoring periods: - reduce the number of samples in accordance with Appendix 3-7 - reduce the frequency of sampling to once per year. Verify that systems maintaining the range of values for the water quality control parameters reflecting optimal corrosion control treatment during each of two consecutive 6-mo monitoring periods reduce monitoring only with Division approval. Verify that systems serving less than 50,001 persons reduce the frequency of monitoring for lead and copper from annually to once every 3 yr only if the following apply: - lead and copper action levels have been met during three consecutive years of monitoring - the system has Division approval. Verify that systems reducing the number and frequency of sampling collect these samples from sites included in the pool of targeted sampling sites identified in this section. Verify that systems sampling annually or less frequently conduct lead and copper tap sampling during the months of June, July, August, or September.
3-64. Installations must meet specific monitoring requirements for water quality parameters (RSDW, Chapter 391-3-5, Section 391-3-5-.25(8)(a) and (d)).	(NOTE: The requirements of this section are summarized in a table at the end of 40 CFR 141.87.) Verify that the following locations are used for sample collection to monitor water quality parameters: - representative taps throughout the distribution system - entry points to the distribution system during periods when water is representative of all sources being used. Verify that systems collect the following number of samples at the number of sites identified under "Standard Monitoring" in Appendix 3-8: - two tap samples during each monitoring period described in this section - two samples during the initial monitoring period at each entry point to the distribution system - one sample during each subsequent monitoring period for each applicable water quality parameter at each entry point to the distribution system.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-65. Installations must meet monitoring requirements for water quality parameters after installation of corrosion control or after the Division specifies water quality parameter values (RSDW, Chapter 391-3-5, Section 391-3-5-.25(8)(c)).	Determine if the system has installed corrosion control or the Division has specified water quality parameter values for optimal corrosion control.
	
	Verify that the following systems monitor at the frequencies listed:
	
	- systems serving more than 50,000, during each 6 mo monitoring period
	- systems serving less than 50,001, when the system exceeds the lead and copper action level.
	
	Verify that system obtains two tap samples to monitor for the following:
	
	- pH
	- alkalinity
	- orthophosphate, when an inhibitor containing phosphate is used
	- silica, when an inhibitor containing silica is used
	- calcium.
	
	Verify that systems obtain one sample every 2 weeks at each entry point to the distribution system for the following:
	
	- pH
	- when alkalinity is adjusted as part of optimal corrosion control, for the following:
	  - a reading of the dosage rate of the chemical used to adjust alkalinity
	  - the alkalinity concentration.
	- when a corrosion inhibitor is used as part of optimal corrosion control, for the following:
	  - a reading of the dosage rate of the inhibitor used
	  - the concentration of orthophosphate or silica.
	
	(NOTE: A confirmation sample may be taken within 3 days after the first sample. The result must be averaged with the first sampling result and the average must be used for any compliance determinations.)

3-66. Installations must meet requirements for initial sampling to measure water quality parameters (RSDW, Chapter 391-3-5, Section 391-3-5-.25(8)(b)).	Verify that systems serving more than 50,000 persons conduct initial sampling to measure water quality parameters at taps and at each entry point to the distribution system during each 6-mo monitoring period. Verify that systems serving less than 50,001 persons conduct initial sampling when the system exceeds the lead or copper action levels. Verify that initial sampling monitors for the following: - pH - alkalinity - calcium - conductivity - orthophosphate, when an inhibitor containing phosphate is used - silica, when an inhibitor containing silica is used - water temperature.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-67. Systems must meet specific requirements for reduced monitoring for water quality parameters (RSDW, Chapter 391-3-5, Section 391-3-5-.25(8)(e) and (f)).	Verify that systems reduce the number of tap sampling sites to the "Reduced Monitoring" level listed in Appendix 3-8 only if the system has maintained the range of values for the water quality control parameters reflecting optimal corrosion control treatment during each of two consecutive 6-mo monitoring periods. Verify that systems reduce the frequency of tap sample collection from every 6 mo to annually only if the system maintains the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the Division during three consecutive years of monitoring. Verify that systems conducting annual sampling collect samples evenly throughout the year so as to reflect seasonal variability. Verify that systems conducting reduced monitoring resume tap water sampling at standard levels whenever the system fails to operate within the range of values for water quality parameters specified by the Division.
3-68. Installations must meet specific monitoring requirements for lead and copper in source water (RSDW, Chapter 391-3-5, Section 391-3-5-.25(9)).	Verify that systems failing to meet the lead or copper action level on the basis of tap samples collect lead and copper source water samples in accordance with the dates in this rule and the requirements for sample location, number, and method in Primary Standards for Drinking Water - Inorganics. Verify that systems collect one source water sample from each entry point to the distribution system within 6 mo after a tap water sample indicates an excess of lead or copper action levels. Verify that systems collect an additional source water sample from each entry point to the distribution systems during two consecutive 6-mo monitoring periods after the installation of source water treatment and within 36 mo of the Division's decision to require source water treatment. Verify that systems monitor at the following frequencies in cases where and beginning when the Division specifies maximum permissible source water levels or determines that the system is not required to install source water treatment: - water systems using only groundwater, collect samples once during each 3-yr compliance period - water systems using any amount of surface water, collect samples once during each year. (NOTE: A system is not required to conduct source water sampling for lead and/or copper if the system meets the action level for the specific contaminant in tap water samples during the entire source water sampling period applicable to the system in this section.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-68. (continued)	Verify that the following systems reduce the monitoring frequency for lead and/or copper to once during each 9-yr compliance cycle only in the following cases: - for groundwater systems, after demonstrating that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and/or copper concentrations during at least three consecutive 3-yr compliance periods - for surface water systems, after demonstrating that finished drinking water entering the distribution system has been maintained below the maximum permissible concentrations for at least three consecutive years. (NOTE: A water system that uses a new source of water is not eligible for reduced monitoring until concentrations in samples collected from the new source during three consecutive monitoring periods are below the maximum permissible lead and copper concentrations.)
3-69. Installations must meet specific methodological requirements for analyses contaminants (RSDW, Chapter 391-3-5, Section 391-3-5-.25(10)).	Verify that installations perform analyses for the following contaminants in accordance with 40 CFR 141.89: - lead - copper - pH - conductivity - calcium - alkalinity - orthophosphate - silica - temperature.
3-70. Installations must meet specific reporting requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.25(11)).	Verify that all water systems report all information to the Division in accordance with 40 CFR 141.90.
3-71. Installations must meet specific recordkeeping requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.25(12)).	Verify that all systems retain on their premises original records of the following: - sampling data and analyses - reports - surveys - letters - evaluations - schedules - Division determinations - any other information required in accordance with 40 CFR 141.91.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-72. Installations must meet specific treatment techniques for acrylamide and epichlorohydrin in lieu of MCLs (RSDW, Chapter 391-3-5, Section 391-3-5-.25(13)).	Verify that systems certify annually in writing to the Division that when acrylamide and epichlorohydrin are used in drinking water systems, the combination of dose and monomer level does not exceed the following levels: - 0.05 percent dose at 1 ppm (or equivalent) for acrylamide - 0.01 percent dose at 20 ppm (or equivalent) for epichlorohydrin. Verify that all such certifications are made by manufacturers or third parties, as approved by the Division.
UNREGULATED CONTAMINANTS **3-73.** Installations must monitor for unregulated chemical contaminants in drinking water (RSDW, Chapter 391-3-5, Section 391-3-5-.26).	(NOTE: Instead of performing the monitoring in this requirement, community water systems and nontransient, noncommunity water systems serving fewer than 150 service connections may notify the Division stating that the system is available for sampling.) Verify that community and nontransient, noncommunity water systems meet the following monitoring requirements by 31 December 1995: - take four consecutive quarterly samples at each sampling point for each contaminant listed in Appendix 3-9 and report results to the Division - take one sample at each sampling point for each contaminant listed in Appendix 3-10 and report results to the Division. (NOTE: Systems may apply to the Division for a waiver of monitoring requirements.) Verify that public water systems using the following types of water sources monitor for organics at the following sampling points: - groundwater systems, one sample at every entry point to the distribution system which is representative of each well after treatment - surface water systems (including systems with a combination of surface and ground sources), one sample at every entry point to the distribution system after any application of treatment or at a point in the system determined to be more representative of each source or treatment plant. (NOTE: If a system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point to the distribution system during periods of normal operating conditions, when the water is representative of all sources. The Division may reduce the total number of samples which must be analyzed by allowing the use of compositing.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-74. Suppliers of water to community and nontransient noncommunity water systems must meet sodium monitoring standards (RSDW, Chapter 391-3-5, Section 391-3-5 -.26(2)).	Verify that suppliers of water to community and nontransient noncommunity water systems monitor for sodium concentration levels by collecting one sample per plant at the entry point to the distribution system. (NOTE: The number of samples are based on the number of treatment plants in the system except multiple wells that draw raw water from a single aquifer may with Division approval be considered one treatment plant. More frequent samples for sodium must be collected for locations where the sodium content is variable.) Verify that samples are collected and analyzed annually for systems utilizing surface water sources. Verify that samples are collected and analyzed at least every 3 yr for systems utilizing only groundwater sources. Verify that the results of sodium analyses are reported to the Division within 10 days of the month following the month sample results were received, or within 10 days of the end of the required monitoring period, whichever occurs first. Verify that if more than annual sampling is required, the results are reported to the Division within 10 days of the month following the month that the results were received for the last sample taken for the annual average. Verify that the suppliers notify the appropriate local and state public health officials of the sodium levels by direct mail within 3 mo of the receipt of results and a copy of the notice is sent to the Division within 10 days of issuance. Verify that initial analyses for sodium for new community public water systems are completed within 1 yr from the effective date of the permit to operate. Verify that analyses for sodium are performed in accordance with 40 CFR 141.41(d).

3-75. Suppliers of water to community systems must meet sampling standards to determine corrosivity (RSDW, Chapter 391-3-5, Section 391-3-5-.26(3)).	Verify that suppliers of water to community water systems determine the corrosivity characteristics of the water by collecting samples from representative entry points to the water distribution system.
	
	Verify that suppliers of water collect the following samples:
	
	- two samples for each plant that uses surface water sources:
	  - one sample collected during midwinter
	  - one sample collected during midsummer.
	- one sample for each plant that uses only groundwater sources.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-75. (continued)	(NOTE: The minimum number of samples are based on the number of plants in the system except multiple wells that draw raw water from a single aquifer may with Division approval be considered one treatment plant for determining the minimum number of samples.) Verify that determination of corrosivity characteristics includes measurement of the following: - pH - calcium hardness - alkalinity - temperature - total dissolved solids (total filterable residue). (NOTE: The Division has the discretion to require monitoring for additional parameters which may indicate corrosivity characteristics, such as sulfates and chlorides.) Verify that the results of analyses for corrosivity characteristics are reported to the Division within the first 10 days of the month following the month sample results were received, or within 10 days of the end of the required monitoring period, whichever occurs first. Verify that if more frequent sampling is required, the results are reported to the Division within 10 days of the month following the month that the results of the last sample were received. Verify that analyses conducted to determine the corrosivity of the water are made in accordance with 40 CFR 141.42(c). (NOTE: When required by the Division, the supplier for community and nontransient, noncommunity public water systems must implement a corrosion control program satisfactory to the Division to insure that the drinking water is not unduly corrosive.)
PUBLIC WATER SYSTEMS - MONITORING AND REPORTING **3-76.** Installations with public water systems must meet requirements for using Division-certified laboratories (RSDW, Chapter 391-3-5, Section 391-3-5-.29).	Verify that analyses of samples used to determine compliance with MCLs are done at laboratories certified by the Division.

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

3-77. Installations with public water systems may be required to submit monitoring records to the Division (RSDW, Chapter 391-3-5, Section 391-3-5-.30).	Verify that the supplier of water reports results of any test measurement or analysis to the Division within the following time limits:
	- within the first 10 days following the month that the result is received
	- within the first 10 days following the end of the required monitoring period as stipulated by the Division, whichever is shortest.
	
	(NOTE: Installations with public water systems are not required to report analytical results to the Division when a State laboratory does the analyses and reports to the Division.)
	
	Verify that public water systems notify the Division by telephone within 48 h or before the end of the following business day, whichever is earliest, in the following cases:
	- failure to comply with one of the following:
	  - safe drinking water regulations or other requirements
	  - monitoring requirements
	  - maximum contaminant levels
	  - treatment technique requirements.
	- upon discovering that a waterborne disease outbreak potentially *attributable to the water system has occurred.*
	
	Verify that a written report follows telephone notification.

PUBLIC WATER SYSTEMS - CUSTOMER NOTIFICATION **3-78.** Installations with public water systems must meet public notification requirements (RSDW, Chapter 391-3-5, Section 391-3-5-.32).	Verify that the supplier of water notifies persons served by the system as required in 40 CFR 141.32, 141.16(a), and 143.5, in following cases: - failure to comply with an applicable primary MCL - failure to comply with an applicable secondary MCL for fluoride - failure to comply with an applicable testing procedure - when the system is granted a variance or an exemption from an applicable MCL - failure to comply with the requirements of any schedule prescribed pursuant to a variance or exemption - failure to comply with any treatment technique requirement specified by the Director - failure to perform any required monitoring. (NOTE: Language incorporating the recommendations of state and local health authorities is to be included in statements to the public about precautions to be taken when there is an acute risk to health.)

COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
3-78. (continued)	Verify that installations of each community water system and each nontransient, noncommunity water system issue notice in accordance with 40 CFR 141.34 to persons served by the system that may be affected by lead contamination of their drinking water. (NOTE: The installation will provide notice under this requirement even if there is no violation of the national primary drinking water regulation for lead.) Verify that the installation with a community or nontransient, noncommunity water system required to monitor for unregulated organic chemicals notify persons served by the system of the availability of the results of sampling in accordance with 40 CFR 141.35.

Appendix 3 - 1

Minimum Casing Wall Thickness

(Source: RSDW, Chapter 391-3-5, Sections 391-3-5-.06(d)(1) and 391-3-5-.07(5)(b))

(1) Steel Pipe Well Casing

Nominal Casing Diameter in inches	Minimum Wall Thickness in inches
4	0.188
5	0.188
6	0.188
8	0.219
10	0.250
12	0.250
14	0.312
16	0.312
18	0.375
20	0.375
24	0.375

(2) Plastic Well Casing

Nominal Casing Diameter in inches	Minimum Wall Thickness in inches
4	0.265
4.5	0.291
6	0.390
8	0.508
10	0.632
12	0.750

Appendix 3 - 2

Total Coliform Monitoring Frequency for Community Water System

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.23(1)(b))

Population Served			Minimum Number of Samples Per Month
25	to	1000	1 *
1001	to	2500	2
2501	to	3300	3
3301	to	4100	4
4101	to	4900	5
4901	to	5800	6
5801	to	6700	7
6701	to	7600	8
7601	to	8500	9
8501	to	12,900	10
12,901	to	17,200	15
17,201	to	21,500	20
21,501	to	25,000	25
25,001	to	33,000	30
33,001	to	41,000	40
41,001	to	50,000	50
50,001	to	59,000	60
59,001	to	70,000	70
70,001	to	83,000	80
83,001	to	96,000	90
96,001	to	130,000	100
130,001	to	220,000	120
220,001	to	320,000	150
320,001	to	450,000	180
450,001	to	600,000	210
600,001	to	780,000	240
780.001	to	970,000	270
970,001	to	1,230,000	300
1,230,001	to	1,520,000	330
1,520,001	to	1,850,000	360
1,850,001	to	2,270,000	390
2,270,001	to	3,020,000	420
3,020,001	to	3,960,000	450
3,960,001	or	more	480

* Includes public water systems which have at least 15 service connections, but serve fewer than 25 persons.

Appendix 3 - 3

Maximum Contaminant Levels of Inorganic Chemicals

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.18(1))

Contaminant Level	Milligrams per Liter
Arsenic	0.05***
Asbestos	7 Million** Fibers/ L longer than 10 µm
Barium	2.0**
Cadmium	0.005**
Chromium	0.1**
Fluoride	4.0***
Lead	*
Mercury	0.002**
Nitrate (as N)	10.0****
Nitrite (as N)	1.0****
Total Nitrate and Nitrite (as N)	10****
Selenium	0.05**

* see Lead and Copper Treatment Techniques

** MCLs for these chemicals apply to community water systems and nontransient, noncommunity water systems.

*** MCLs for these chemicals apply to community water systems.

**** MCLs for these chemicals apply to all public water systems. (NOTE: At the discretion of the Director, nitrate levels not to exceed 20 mg/ L may be allowed in a noncommunity water system if the supplier of water demonstrates the following:

- such water will not be available to children under 6 mo of age
- there will be continuous posting of the fact that nitrate levels exceed 10 mg/ L and the potential health effects of exposure
- local and state public health authorities will be notified annually of nitrate levels that exceed 10 mg/ L
- no adverse health effects result.)

Appendix 3 - 4

Maximum Contaminant Levels for Organic Chemicals

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.18(2))

Contaminant Level in Milligrams per Liter

(1) Pesticides and Polychlorinated Byphenyls

Alachlor	0.002
Aldicarb	0.003
Aldicarb sulfone	0.002
Aldicarb sulfoxide	0.004
Atrazine	0.003
Carbofuran	0.04
Chlordane	0.002
Dibromochloropropane	0.0002
Endrin	0.0002
Ethylene dibromide	0.00005
Heptachlor	0.0004
Heptachlor epoxide	0.0002
Lindane	0.0002
Methoxychlor	0.04
Polychlorinated biphenyls (PCBs)	0.0005
Pentachlorophenol	0.001
Toxaphene	0.005
2,4-D	0.07
2,4,5-TP	0.05

(2) Volatile Organic Contaminants

Benzene	0.005
Carbon tetrachloride	0.005
cis-1,2-Dichlorethylene	0.07
Ethylbenzene	0.7
Monochlorobenzene	0.1
o-Dichlorobenzene	0.6
para-Dichlorobenzene	0.075
Styrene	0.1
Tetrachloroethylene	0.005
Toluene	1
trans-1,2-Dichloroethylene	0.1
Trichloroethylene	0.005
Vinyl chloride	0.002
Xylenes (total)	10
1,1-Dichloroethylent	0.007
1,1,1-Trichloroethane	0.2
1,2-Dichloropropane	0.005

Appendix 3 - 5

Radioactive Contaminants

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.18(5))

Contaminant	Maximum Contaminant Concentration (pCi/ L)
Gross Alpha (including radium-226 but excluding radon and uranium)	15
Gross Beta	*
Combined Radium-226 and 228	5
Strontium-90	8
Tritium	20,000
Other Radionuclides	*

* The average annual concentration of beta particle and photon radioactivity from manmade radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem per year. These annual dose equivalent calculations are to be based on a 2-L/day drinking water intake using the 168-h data listed in NBS Handbook 69 from the U.S. Department of Commerce.

Appendix 3 - 6

Secondary Maximum Contaminant Levels

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.19(2))

Contaminant Level in Milligrams per Liter

Aluminum (Al)	0.05 to 0.02
Chloride (Cl)	250
Color	15 color units
Copper (Cu)	1.0
Fluoride (F)*	2.0
Foaming Agents	0.5
Iron (Fe)	0.3
Manganese (Mn)	0.05
Silver (Ag)	0.1
Sulfate (SO_4)	250
Total Dissolved Solids (TDS)	500
Zinc (Zn)	5

* Fluoride also has a Primary MCL.

Appendix 3 - 7

Number of Sites for Lead and Copper Tap Water Monitoring

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.25(7)(c) and (d))

System Size (# of People Served)	# of Sites Standard Monitoring	# of Sites Reduced Monitoring
> 100,000	100	50
10,001-100,000	60	30
3301-10,000	40	20
501-3300	20	10
101-500	10	5
< 101	5	5

(NOTE: For systems serving less than 3301 persons, the first monitoring period begins on 1 July 1993.)

Appendix 3 - 8

Tap Sampling Requirements for Water Quality

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.25(8))

System Size (Population)	# of Sites Standard Monitoring	# of Sites Reduced Monitoring
> 100,000	25	10
10,001 to 100,000	10	7
3301 to 10,000	3	3
501 to 3300	2	2
101 to 500	1	1
< 101	1	1

Appendix 3 - 9

Unregulated Organic Contaminants

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.26(1)(k))

Unregulated Organics Contaminants	Unregulated Organic Phase II Effective Date 30 July 1992	Proposed Phase V MCLs (mg/ L)
Aldrin	yes	
Butachlor	yes	
Carbaryl	yes	
Dalapon	yes	0.2
Di(2-ethylhexyl)adipate	yes	0.5
Di(2-ethylhexyl) phthalates	yes	0.004
Dicamba	yes	
Dieldrin	yes	
Dinoseb	yes	0.007
Diquat	yes	0.02
Endothall	yes	0.1
Gylphosate	yes	0.7
Hexachlorobenzene	yes	0.001
Hexachlorocyclopentadiene	yes	0.05
3-Hydroxycarbofuran	yes	
Methomyl	yes	
Metolachlor	yes	
Metribuzin	yes	
Oxamyl (vydate)	yes	0.2
PAHs:	yes	0.002
Benzo(a)pyrene		
Benzo(a)anthracene		0.0001
Benzo(b)fluroanthene		0.0002
Benzo(k)fluoranthene		0.0002
Chrysene		0.0002
Dibenz(a,h)anthracene		0.0003
Indenopyrene		0.0004
Picloram	yes	0.5
Propachlor	yes	
Simazine	yes	0.0001
2,3,7,8-TCDD (Dioxin)	yes	$5x10^{H}$

Appendix 3 - 10

Unregulated Inorganic Contaminants

(Source: RSDW, Chapter 391-3-5, Section 391-3-5-.26(1)(l))

Unregulated Inorganic Contaminants	Unregulated Inorganic Phase II Effective Date 30 July 1992	Proposed Phase V MCL (mg/ L)
Antimony	yes	0.01/ 0.005
Beryllium	yes	0.001
Cyanide	yes	0.2
Nickel	yes	0.1
Sulfate	yes	400/ 500
Thallium	yes	0.002/ 0.001

INSTALLATION:	COMPLIANCE CATEGORY: SAFE DRINKING WATER ACT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 4

RESOURCE CONSERVATION AND RECOVERY ACT,

SUBTITLE C

Georgia Supplement

SECTION 4

RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE C

Georgia Supplement

The *Rules of Georgia Department of Natural Resources* (RGDNR), Chapter 391-3-11 applies to hazardous waste management and adopts by reference all of the following portions of Title 40 of the Code of Federal Regulations (CFR):

40 CFR Sections 124.1(a), 124.3, 124.5, 124.6(a) and (b), 124.6 (d) and (e), 124.7, 124.8, 124.10, 124.11, 124.12(a), 124.13 through 124.15, 124.17(a) and (c)
40 CFR 260 through 263
40 CFR 264 Subparts A through R, W, X, AA, and BB
40 CFR 265 Subparts A through R, W, AA, and BB
40 CFR 266
40 CFR 268, except for Sections 268.5, 268.6, 268.42, and 268.44
40 CFR Sections 270.1(c), 270.2, 270.4 through 270.6, 270.10, 270.11, 270.12(b), 270.13 through 270.26, 270.29 through 270.34, 270.40 through 270.43, 270.60 through 270.63, 270.65, 270.66, 270.70 through 270.73.

The requirements in this Protocol represent those rules in Chapter 391-3-11 that are an addition to or modification of the adopted portions of 40 CFR. Please refer to the appropriate sections of the U.S. ECAS manual for the Federal requirements applicable to hazardous waste management.

Definitions

- *Director* - the Director of the Environmental Protection Division of the Georgia Department of Natural Resources.

- *Division* - the Environmental Protection Division of the Georgia Department of Natural Resources.

RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE C

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
All Installations	4-1
Permits	4-2

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle C (RCRA-C) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
4-1. Installations that generate or handle hazardous waste must meet specific notification requirements (RGDNR, Chapter 391-3-11-.04).	Determine if the installation generates or transports hazardous waste, or owns or operates a hazardous waste storage, treatment, or disposal facility. Verify that the installation has notified the Division.
PERMITS	
4-2. Installations must have a permit in order to construct, operate or modify a hazardous waste facility (RGDNR, Chapter 391-3-11-.11(1), (2), (5), and (8)).	Determine if the installation is constructing, installing, operating, or substantially altering a hazardous waste facility. Verify that the installation has either obtained a permit or been granted interim status. Verify that it meets all of the following requirements: - for facilities granted interim status, operation in accordance with the information supplied on the permit application - for facilities with a permit, operation in accordance with permit terms and conditions. Verify that permits are not transferred from person to person, site to site, or facility to facility without Director approval.

INSTALLATION:	COMPLIANCE CATEGORY: Resource Conservation and Recovery Act Subtitle C (RCRA-C) Georgia Supplement	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

SECTION 5

RESOURCE CONSERVATION AND RECOVERY ACT,

SUBTITLE D

Georgia Supplement

SECTION 5

RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE D

Georgia Supplement

Definitions

These definitions were obtained from the following sections of the *Rules of Georgia Department of Natural Resources* (RGDNR):

391-3-4-.01
391-3-4-.08(2)
391-3-4-.15(2)
391-3-4-.15(3)(b)
391-3-4-.19(2).

- *Act* - the *Georgia Comprehensive Solid Waste Management Act.*

- *Air Curtain Destructor* - a forced air pit, thermal treatment technology for the burning of wood wastes.

- *Baling* - a volume reduction technique whereby solid waste is compressed into bales.

- *Biological Waste* - blood and blood products, exudates, secretions, suctionings, and other body fluids which contain free liquids and cannot be or are not directly discarded into a municipal sewer system.

- *Biomedical Waste*- any solid waste which contains any of the following kinds of waste:
  1. pathological waste
  2. biological waste
  3. cultures or stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures
  4. contaminated animal carcasses, body parts, their bedding, and other wastes from such animals which are infected with or which have been exposed to infectious agents capable of causing disease in man
  5. sharps
  6. chemotherapy waste
  7. discarded medical equipment and parts, but not including expendable supplies and materials, which have not been decontaminated and that were in contact with infectious agents.

- *Certificate* - a document issued by an organization approved by the Director, stating that the operator has met the requirements of the Board for the specified operator classification of the certification program.

- *Chemotherapy Waste* - any disposable material which has come in contact with cytotoxic/ antineoplastic agents (agents toxic to cells) and/or antineoplastic agents (agents that inhibit or prevent the growth and spread of tumors or malignant cells) during the preparation, handling and administration of such agents, and which is classified as empty; includes, but is not limited to: masks; gloves; gowns; empty IV tubing; bags and vials; and other contaminated materials.

- *Closure* - a procedure approved by the Division which provides for the cessation of waste receipt at a solid waste disposal site and for the securing of the site in preparation for postclosure.

- *Collector* - the person or people who, under agreements verbal or written, and with or without compensation, does the work of collecting and/or transporting solid wastes, but not including any individual collecting and/or transporting waste from his own single family dwelling unit.

- *Composting* - the controlled biological decomposition of organic matter into a stable, odorfree humus.

- *Construction/ Demolition Waste* - waste building materials and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings, and other structures. Such wastes include, but are not limited to, asbestos-containing waste, wood, bricks, metal, concrete, wallboard, paper, cardboard, inert waste landfill material, and other nonputrescible wastes which have a low potential for groundwater contamination.

- *Director* - the Director of the Environmental Protection Division of the Georgia Department of Natural Resources.

- *Disposal Facility* - any facility or location where the final disposition of solid waste occurs, including, but not limited to, landfills and solid waste thermal treatment technology facilities.

- *Division* - the Environmental Protection Division of the Georgia Department of Natural Resources.

- *Facility* - with references to the requirements of the BIOMEDICAL WASTE section, one or more people generating biomedical waste who share common waste management services including, but not limited to, bulk storage containers.

- *Generator* - any person who creates solid waste.

- *Garbage*- food waste including waste accumulations of animal or vegetable matter used or intended for use as food, or that attends the preparation, use, cooking, dealing in, or storing of meat, fish, fowl, fruit or vegetables.

- *Industrial Waste* - solid waste that is generated by manufacturing or industrial processes and that is not a hazardous waste.

- *Inert Waste Landfill* - a disposal facility accepting only wastes that will not or are not likely to cause production of leachate of environmental concern. Such wastes are limited to earth and earthlike products, concrete, cured asphalt, rock, bricks, yard trash, stumps, limbs, and leaves.

- *Leachate* - a liquid that has passed through or emerged from solid waste and that contains soluble, suspended, or miscible materials removed from such wastes.

- *Landfill* - an area of land on which, or an excavation in which, solid waste is placed for permanent disposal and which is not a land application unit, surface impoundment, injection well, or compost pile. "Permanent disposal" requires the placement of daily, intermediate, and/or final earth, synthetic, or earth/synthetic combination cover over the solid waste.

- *Leachate Collection System* - a system at a landfill for collection of the leachate which may percolate through the waste and into the surrounding soils.

- *Liner* - a continuous layer of natural or manmade materials, beneath or on the sides of a disposal site or disposal site cell, which restricts the downward or lateral escape of solid waste, solid waste constituents, or leachate.

- *Liquid Waste* - any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paints Filter Liquids Test) in USEPA Publication No. SW-846.

- *Manifest* - a form or document used for identifying the quantity and composition and the origin, routing, and destination of scrap tires during transportation from the point of generation, through any intermediate points, to an end user, processor, or disposer approved by the Division.

- *Materials Recovery Facility* - a solid waste handling facility that provides for the extraction from solid waste of recoverable materials, materials suitable for use as a fuel or a soil amendment, or any combination of such materials.

- *Monofill* - a method of solid waste disposal that involves the landfilling of one waste type, or of wastes having very similar characteristics, in a segregated trench or area which is physically separated from dissimilar or incompatible waste.

- *Municipal Solid Waste* - any solid waste resulting from the operation of residential, commercial, governmental, or institutional establishments, except such solid waste disposed of in a private industry solid waste disposal facility, including yard trash, but not including solid waste from mining, agricultural, or silvicultural operations.

- *Municipal Solid Waste Disposal Facility* - any facility or location where the final disposition of any amount of municipal solid waste occurs, whether or not mixed with or including other waste allowed under Subtitle D of the Federal *Resource Conservation and Recovery Act of 1976*, and includes, but is not limited to, municipal solid waste landfills and solid waste thermal treatment technology facilities.

- *Municipal Solid Waste Disposal Facility Operator* - the person stationed on the site who is in responsible charge of, and has direct supervision of, the daily field operations of a municipal solid waste disposal facility to ensure that the facility operates in compliance with the permit.

- *Municipal Solid Waste Landfill* - a disposal facility where any amount of municipal solid waste, whether or not mixed with or including other waste allowed under Subtitle D of the Federal *Resource Conservation and Recovery Act of 1976*, is disposed of by means of placing an approved cover thereon.

- *Open Dump* - a disposal facility at which solid waste from one or more sources is consolidated and left to decompose, burn or to otherwise create a threat to human health or the environment.

- *Operator* - the person having direct supervision of the daily field operations of a solid waste handling facility to ensure that the facility operates in compliance with the permit.

- *Pathological Waste* - all recognizable human tissues and body parts, except teeth, which are removed during surgery, obstetrical procedures, autopsy, and laboratory procedures.

- *Post-Closure* - a procedure approved by the Division to provide for long-term financial assurance, monitoring, and maintenance of a solid waste disposal site to protect human health and the environment.

- *Processing Operation* - any method, system, or other treatment designed to change the physical form or chemical content of solid waste, including all aspects of its management (administration, personnel, land, equipment, buildings, and other elements).

- *Private Industry Solid Waste Disposal Facility* - a disposal facility which is operated exclusively by and for a private solid waste generator for the purpose of accepting solid waste generated exclusively by said private solid waste generator.

- *Putrescible Wastes* - wastes that are capable of being quickly decomposed by microorganisms, including but not limited to, kitchen wastes, animal manure, offal, hatchery and poultry processing plant wastes, dead animals, garbage, and wastes that are contaminated by such wastes.

- *Recovered Materials* - those materials which have known use, reuse, or recycling potential, which can be feasibly used, reused or recycled, and which have been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing.

- *Recovered Materials Processing Facility* - a facility engaged solely in the storage, processing, and resale or reuse of recovered materials.

- *Recycling* - any process by which materials which would otherwise become solid waste are collected, separated, or processed, and reused or returned to use in the form of raw materials or products.

- *Retail Tire Dealer* - a person actively engaged in the business of selling new replacement tires, including people who may also be, but are not limited to, manufacturers, wholesalers, and others who sell new replacement tires to the ultimate consumer.

- *Scavenge* - the unpermitted removal of solid waste from a solid waste handling facility.

- *Scrap Tire* - a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect.

- *Scrap Tire Carrier* - any person engaged in picking up or transporting scrap tires not otherwise exempted in this Rule for the purpose of removal to a scrap tire processor, tire retreader, or disposal facility; but does not include any of the following:
  1. a solid waste collector whose primary business is the collection of municipal solid waste
  2. a private individual or private carrier who transports the person's own scrap tires to a scrap tire processor, tire retreader, or disposal facility
  3. a person who transports fewer than five scrap tires for disposal
  4. the United States, or the State of Georgia and any of its counties or municipalities.

- *Scrap Tire Generator* - any person who generates scrap tires, including, but not limited to, retail tire dealers, retreaders, scrap tire processors, automobile dealers, private company vehicle maintenance shops, garages, service stations, and city/county/state governments.

- *Scrap Tire Processing* - any method, system, or other treatment designed to change the physical form, size, or chemical content of scrap tires and includes all aspects of its management (administration, personnel, land, equipment, buildings, and other elements); includes, but is not limited to, shredding, baling, recycling, and sorting of scrap tires.

- *Scrap Tire Sorter* - any person, other than the original scrap tire generator, who handles mixed tires by separating used tires and retreadable casings from scrap tires.

- *Sharps* - any discarded article that may cause punctures or cuts, including but not limited to items like needles, IV tubing and syringes with needles still attached, and scalpel blades.

- *Shredding* - the process by which solid waste is cut or torn into small pieces for final disposal or further processing.

- *Solid Waste* - discarded putrescible and nonputrescible wastes, except water-carried body waste and recovered materials; includes: garbage; rubbish such as paper, cartons, boxes, wood, tree branches, yard trimmings, furniture and appliances, metal, tin cans, glass, crockery, or dunnage; ashes; street refuse; dead animals; sewage sludges; animal manures; industrial waste such as waste materials generated in industrial operations; residue from solid waste thermal treatment technology; food processing wastes; demolition wastes; abandoned automobiles; dredging wastes; construction wastes; and any other waste material in a solid, semisolid or liquid state not otherwise defined in the Georgia *Comprehensive Solid Waste Management Act*; but not including any material regulated by the Georgia *Water Quality Control Act* or the Georgia *Air Quality Act*.

- *Solid Waste Handling* - the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste, or any combination of such activities.

- *Solid Waste Handling Facility* - any facility, the primary purpose of which is the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste, or any combination of such activities.

- *Solid Waste Handling Permit* - written authorization granted to a person by the Director to engage in solid waste handling.

- *Solid Waste Management Act* - the Georgia *Comprehensive Solid Waste Management Act*.

- *Solid Waste Thermal Treatment Technology Facility* - any solid waste handling facility, the purpose of which is to reduce the amount of solid waste to be disposed of through a process of combustion, with or without the process of waste to energy.

- *Special Solid Waste* - any solid waste that is not otherwise regulated under the Georgia *Hazardous Waste Management Act*, and that is produced by or originates from a source or generator not subject to the Act, O.G.C.A. 12-8-24.

- *Transfer Station* - a facility used to transfer solid waste from one transportation vehicle to another for transportation to a disposal facility or processing operation.

- *Yard Trash* - vegetative matter resulting from landscaping maintenance and landclearing operations other than mining, agricultural and silvicultural operations.

RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE D

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
All Installations	5-1 through 5-3
Permits	5-4 through 5-7
Reporting Requirements	5-8
Operator Certification	5-9
Landfills	5-10 through 5-16
Industrial Waste Disposal Facilities	5-17
Construction/Demolition Wastes Disposal Facilities	5-18
Special Solid Waste Disposal Facilities	5-19
Biomedical Waste	5-20 through 5-24
Composting	5-25 and 5-26
Groundwater Monitoring	5-27
Scrap Tire Management	5-28 through 5-30
Shredding/Baling/Materials Recovery Facilities	5-31 and 5-32
Transportation of Special Solid Waste	5-33
Solid Waste Thermal Treatment Facilities	5-34 through 5-36
Closure and Postclosure Care	5-37 and 5-38

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	

5-1. Installations that engage in solid waste handling must meet state solid waste management requirements unless specifically exempted (RGDNR, Chapter 391-3-4, Sections 391-3-4-3-4-.07(4)(c); and 391-3-4.16(1)(a)).	Determine if the installation conducts any solid waste handling operations.
	
	Verify that each of the installation's solid waste handling operations meets one of the following conditions:
	
	- is exempt from all requirements in this section because it meets all of the following conditions
	  - involves disposal of solid waste originating on installation premises onto installation land or facilities
	  - does not adversely affect the public health
	- is exempt from all requirements in this section because it involves the handling of recovered materials, provided that the installation meets all of the following conditions:
	  - has proof that the material is being sold, used, reused, or recycled
	  - can show that the amount of material sold, used, reused, or recycled during the preceding 12 months (mo) equals at least 60 percent by weight or volume of the material received
	- is exempt from all requirements in this section because it is a yard waste composting operation that meets all of the following requirements
	  - the yard waste is kept separate from solid waste
	  - the yard waste is converted to a usable compost or mulch product
	- is a solid waste handling facility for which specific requirements have not been developed, and has a permit from the Director.

5-2. Installations that engage in solid waste handling must meet specific operating requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.04(1) and (4)).	Verify that installation solid waste handling practices do not result in any of the following: - conditions conducive to insect and rodent infestation or to harboring and feeding of wild dogs or other animals - impairment of air quality - impairment of ground or surface water quality - impairment of the quality of the environment - creation of other hazards to the public health, safety, or well being. Verify that the installation meets all of the following operating requirements: - no solid waste is burned except by a Division approved thermal treatment technology facility - no scavenging is allowed at any solid waste handling facility, disposal site, or processing operation - no solid waste is disposed of in an open dump - no open dumping is permitted on installation premises.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-3. Installations are prohibited from disposing of specific kinds of wastes at any solid waste disposal facility (RGDNR, Chapter 391-3-4, Section 391-3-4 -.04(6)).	Verify that none of the following prohibited wastes is disposed of at a solid waste disposal facility: - hazardous wastes - radioactive wastes - lead acid batteries - all other wastes that have been prohibited by the Division.
PERMITS	
5-4. Installations that engage in solid waste handling must meet specific permit requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.02).	Determine if the installation engages in solid waste or special solid waste handling, or operates or plans to construct a solid waste handling facility. Verify that the installation has met one of the following conditions: - the installation holds a valid Solid Waste Handling Permit - the installation has a Permit-By-Rule. Verify that the installation meets the provisions specified in the permit. Verify that all modifications of the design or operation of the facility, or of any other information specified on the permit, have been approved by the Division. Verify that if the installation plans to modify the design or operation of a facility the Division is notified prior to modification and the necessary approvals are obtained.
5-5. Installations that engage in solid waste collection must meet specific requirements in order to obtain a Permit-By-Rule (RGDNR, Chapter 391-3-4, Section 391-3-4 -.06(1)(a) and (b)).	Determine if the installation collects solid waste and holds a Permit-By-Rule. Verify that the installation has notified the Director of its activities within 30 days of beginning them. Verify that the installation does not collect regulated quantities of hazardous wastes except in accordance with state requirements. Verify that the installation complies with all local solid waste rules, regulations, and ordinances. Verify that the installation deposits all collected solid waste in an appropriately permitted solid waste handling facility. Verify that all vehicles and containers used to collect or transport solid waste or similar putrescible wastes, or mixtures containing putrescible wastes are covered, substantially leakproof, durable, and easily cleanable. Verify that all solid waste collection/transportation vehicles are cleaned frequently and are in good repair.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-5. (continued)	Verify that all wastewater from cleaning vehicles is handled in accordance with all applicable wastewater discharge laws and regulations. Verify that spillage of solid waste from containers and vehicles is avoided by careful handling and moving, and by covering when necessary to avoid windblown littering.
5-6. Installations that operate solid waste transfer stations must meet specific requirements in order to obtain a Permit-By-Rule (RGDNR, Chapter 391-3-4, Section 391-3-4 -.06(1)(a) and (c)).	Determine if the installation operates a solid waste transfer station and claims to have a Permit-By-Rule. Verify that the installation has notified the Director of the activities within 30 days of beginning operations. Verify that sewage solids and regulated quantities of hazardous wastes are excluded from the station. Verify that solid waste is confined to the transfer station interior, and not allowed to be scattered outside the transfer station. Verify that station interior floors are free of accumulated waste, and are clean and well drained. Verify that dust, odors, rodents, insects and other pests are controlled at all times. Verify that contaminated washwater is treated using Division approved methodology.
5-7. Installations that operate inert waste landfills must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.06(1)(a) and (d)).	Determine if the installation operates a solid waste transfer station and holds a Permit-By-Rule. Verify that nothing but the following kinds of waste are disposed of in the landfill: - earth and earthlike products - concrete - cured asphalt - rock - bricks - yard trash - land clearing debris (i.e., stumps, limbs, and leaves). Verify that the installation meets the reporting requirements in this section. Verify that the waste materials are spread in uniform layers and compacted to the least practical volume. Verify that all exposed waste is covered over at least once per month with a uniform, compacted layer of clean earth at least 1 ft deep.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-7. (continued)	Verify that the disposal site is graded and drained to minimize runoff onto the landfill, drain water from the landfill surface, and prevent erosion. Verify that access to the landfill is limited to authorized entrances which are closed when the site is not in operation. Verify that fire control equipment and measures are in place including, but not limited to, stockpiled earth. Verify that not later than 1 mo after the last deposit of solid waste in a final lift, a final cover not less than 2 ft deep and vegetative cover are in place. Verify that the installation notifies the Director in all of the following circumstances: - for any facility earmarked for final closure: notification within 30 days of receiving the final load of waste at that facility - for any facility which has not received waste for more than 180 days: immediate notification.
REPORTING REQUIREMENTS	
5-8. Installations that hold municipal solid waste disposal permits must meet specific reporting requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.17).	Determine if the installation holds a municipal solid waste disposal permit or a Permit-By-Rule. Verify that the installation files quarterly reports with the Director on the total weight of solid waste disposed. Verify that the total weight of disposed solid waste is determined by weighing each load of incoming waste or by using approved estimation procedures. Verify that the installation reports to the Director the remaining capacity of the facility, annually on 1 July.
OPERATOR CERTIFICATION	
5-9. Installations that operate municipal solid waste disposal facilities must meet specific operator certification requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.18).	Determine if installation operates any municipal solid waste landfills or solid waste thermal treatment technology facilities (incinerators). Verify that each individual who operates a waste disposal facility is certified by the Division. (NOTE: Certificates are renewable every 5 years (yr).)

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
LANDFILLS	
5-10. Landfills must be constructed to meet specific design requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.07(1) and (2)).	Determine if the installation operates any landfills. Verify that each landfill has been constructed according to the provisions of an approved design and operational plan and the conditions of a Solid Waste Handling Permit. Verify that prior to being opened for operation, all landfill construction and modification projects are certified with the Division. Verify that the installation meets the operational and maintenance requirements of the design plan including, but not limited to, those in all of the following categories, where applicable: - buffer maintenance - leachate collection - erosion and sedimentation control - filling sequence, cover, final grading, and revegetation - access roads and access control - fire protection - the Groundwater and Surface Water Monitoring Plan - methane gas control, including a methane gas monitoring program - closure and post-closure care.
5-11. Installations that operate landfills must meet specific health and safety requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.07(3)(h), (j), (k), (m) and (o)).	Verify that the landfill is operated to prevent air, land or water pollution, and public health hazards or nuisances. Verify that a properly trained and certified supervisor is onsite at all times during operating hours. Verify that landfill operating hours are posted on signs at the entrance. Verify that access to the landfill is limited to authorized entrances and to operating hours. Verify that fire control equipment and measures are in place including, but not limited to, stockpiled earth.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-12. Installations that operate landfills must meet specific landfilling operational requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.07(3)(a) through (f), and (p)).	Verify that the landfill is operated to prevent open burning, scavenging, and open dumping. Verify that the installation's landfilling operation meets all of the following requirements: - solid waste is unloaded only at the working face of the operation - solid waste is spread in uniform layers and compacted to its smallest practical volume before being covered - a cover of at least 6 in. of clean earth is placed over all exposed solid waste by operating day's end or more frequently if required by the Division - no solid waste is left uncovered for more than 24 hours (h) - intermediate cover is not less than 1 ft deep - final cover is not less than 2 ft deep - vegetative cover is in place not later than 1 mo after last deposition of solid waste in a final lift. Verify that the disposal site is graded and drained to minimize runoff onto the landfill, drain water from the landfill surface, and prevent erosion.
5-13. Installations that operate landfills must meet specific site and equipment maintenance requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.07(3)(g) and (l)).	Verify that access roads are in good repair and are passable even in inclement weather. Verify that broken equipment is promptly repaired or replaced. Verify that the entire site is inspected daily and all wind-scattered litter is removed.
5-14. Installations that operate landfills must prevent the dumping of prohibited wastes (RGDNR, Chapter 391-3-4, Section 391-3-4 -.07(3)(i), 391-3-4 -.04(6)(b)(2), and 391-3-4-.04(9)).	Verify that the installation has a plan for preventing the dumping of prohibited wastes. Verify that liquid waste is not disposed of in the landfill unless one of the following (sets of) conditions is met: - the waste is in containers no larger than 1 gallon (gal) and no generator is allowed to discard more than 4 gal of liquids in containers - the waste is nonhazardous and admixed with a bladeable material to render it nonliquid. Verify that no recirculated leachate nor gas condensate is disposed at a municipal landfill unless: - the landfill is equipped with a liner and a leachate collection system - approved by the Director.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-15. Installations that operate landfills must meet specific erosion and sedimentation control requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.07(3)(n)).	Verify that the installation revegetates disturbed soil which will not be a part of the waste disposal area or which will remain exposed for more than 3 mo.
5-16. Installations that operate landfills must meet specific recordkeeping requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.07(3)(q)).	Verify that the installation keeps, for at least 3 yr, daily records of all waste received at the landfill, by actual weight or other approved methods.
INDUSTRIAL WASTE DISPOSAL FACILITIES	
5-17. Installations that operate industrial waste disposal facilities must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.07(4)(a)).	Determine if the installation operates an industrial waste disposal facility. Verify that the facility meets the requirements applicable to solid waste landfills. (NOTE: Industrial Waste Disposal Facilities permitted to receive only a single type of industrial waste (monofill), or to receive only a single industry's waste, may have obtained a variance from some of the requirements applicable to solid waste landfills.)
CONSTRUCTION / DEMOLITION WASTE DISPOSAL FACILITIES	
5-18. Installations that operate construction/ demolition waste disposal facilities must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.07(4)(b)).	Determine if the installation operates any construction/demolition waste disposal facilities. Verify that the facility meets the requirements applicable to solid waste landfills. (NOTE: Construction/Demolition Waste Disposal Facilities may have obtained a variance from some of the requirements applicable to solid waste landfills.)

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SPECIAL SOLID WASTE DISPOSAL FACILITIES	
5-19. Installations that operate disposal facilities that accept special solid wastes must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.10).	Determine if the installation operates a solid waste disposal facility that accepts special solid wastes. Verify that the facility has a permit which allows the operation of a solid waste disposal facility. Verify that the facility meets all the conditions of the permit. Verify that the facility analyzes and inspects all shipments of special solid waste received in accordance with the provisions of a Division approved Waste Analysis Plan. Verify that the facility accepts only those special solid waste shipments that are properly manifested. Verify that facility personnel retain all of the following kinds of records for at least 3 yr: - accurate records of the weight of all special solid waste received at the facility - copies of all manifests that accompanied waste received at the facility. Verify that the facility meets all other applicable requirements of this manual, including the requirements of the Closure and Postclosure Care section.
BIOMEDICAL WASTE	
5-20. Installations that generate or handle biomedical waste must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.15(1), (3)(a), and (3)(c)).	Determine if the installation generates or handles biomedical waste, apart from those wastes that are exempt because they meet both of the following conditions: - they are generated from single family dwelling units or residential premises in the selfcare and treatment of residents, but not including those originating from home health care organizations or physicians treating patients in a home - they are disposed of as residential solid waste. (NOTE: Facilities that might be generating or handling biomedical wastes include, but are not limited to, all of the following: - ambulatory service centers - blood banks - clinics - dental offices - funeral homes - health maintenance organizations (HMOs) - hospitals

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-20. (continued)	- laboratories - medical buildings - physicians' offices - veterinary offices - research facilities - nursing homes - biomedical waste transportation, storage, treatment, and disposal facilities.) Verify that the installation meets one of the following conditions: - the facility has been specifically exempted from biomedical waste handling requirements - the facility meets the applicable requirements of this section and the applicable solid waste handling requirements sections of this protocol.

5-21. Installations that operate facilities that generate less than 100 pounds per month (lb/mo) of biomedical waste must meet specific waste handling requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.15(3)(b), (4)(a) through (c), (6)(c) and (7)(b)).	(NOTE: Installations that generate less than 100 lb/mo and meet these requirements are exempt from all other requirements of this section.)
	
	Determine if the installation operates any facility that generates less than *100 lb/mo of biomedical waste.*
	
	Verify that each facility meets all of the following storage and containment requirements:
	
	- biomedical waste is deposited into separate containers from other kinds of waste at the point of origin
	- disposable containers used for biomedical waste are red or orange, or are clearly marked with the universal biohazard symbol or the word BIOHAZARD
	- sharps are stored, transported, treated and disposed of in leakproof, rigid, puncture-resistant containers which are taped closed or tightly lidded
	- all biomedical waste other than sharps are placed in containers that are moisture-impervious, do not rip, tear or burst in normal use, and are securely closed during storage, handling, and transport
	- biomedical waste storage areas meet all of the following conditions:
	  - are out of rain and wind and away from animals
	  - are not breeding places or food sources for insects or rodents
	  - minimize exposure of the wastes to the public.
	
	Verify that each facility meets all of the following disposal requirements:
	
	- biomedical wastes are disposed of at a permitted landfill or treatment facility
	- recognizable human anatomical remains are not disposed of by landfilling.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-22. Installations that operate facilities that generate 100 lb/mo or more of biomedical waste must meet specific transport requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.15(5)).	Verify that biomedical waste is not transferred to a collector who does not meet the requirements of this protocol, nor to any facility that does not have a valid operating permit. Verify that vehicles used to transport biomedical waste are not used to transport food or food products. Verify that biomedical waste is not transported in the same vehicle with other solid waste unless one of the following conditions is met: - the biomedical waste is in a separate, fully-enclosed, leakproof container - all of the waste is to be treated as biomedical waste. Verify that waste container integrity is not being destroyed during transport. Verify that transport vehicles that have been contaminated with biomedical waste are decontaminated.

5-23. Installations that operate facilities that generate 100 lb/mo or more of biomedical waste must meet specific waste treatment requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.15(6) and (7)).	Verify that the facility does not dispose of untreated biomedical waste by landfilling.
	
	Verify that the facility does not dispose of recognizable human anatomical remains by landfilling.
	
	Verify that all biomedical waste is treated according to one of the following (sets of) requirements:
	
	- for fluid or semisolid biological waste, discharge into a sewer system, but only with the approval of the sewage treatment system operator
	- for chemotherapy waste, treatment at a Director approved facility, but in no case by steam decontamination
	- for all other kinds of waste, treatment by one of the following procedures:
	  - incineration in a thermal treatment technology facility
	  - high pressure steam decontamination in an autoclave
	  - another Director approved method.
	
	Verify that treated biomedical wastes are disposed of at a permitted landfill or treatment facility.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

5-24. Installations that operate facilities that generate 100 lb/mo or more of biomedical waste must meet specific waste treatment equipment operating requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.15(6)(a)).	Determine if the installation operates any facility that generates 100 lb or more per month of biomedical waste and operates equipment to treat that waste prior to disposal.
	
	Verify that thermal treatment equipment is operated according to all of the following requirements:
	
	- primary chamber temperature is high enough to destroy infectious agents and produce a stable and essentially odorfree residue
	- during incineration of chemotherapy wastes, the incinerator meets the following standards:
	  - minimum secondary combustion chamber temperature: 982 °C (1800 °F)
	  - minimum residence time: 2 seconds
	- air contaminant emissions do not exceed state air quality standards.
	
	Verify that high pressure steam decontamination equipment (autoclave) is equipped and operated to meet all of the following requirements:
	
	- chamber temperature is monitored using a recording thermometer
	- chamber temperature is brought up to 121 °C (250 °F) and held there for at least 1/2 h
	- decontamination effectiveness is monitored using biological indicators or other Director approved methods
	- indicators used to monitor effectiveness are placed in the load at the point where thermal penetration is slowest.

COMPOSTING	
5-25. Installations that compost solid waste must meet specific permit requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.16(1)(b)(1)).	Determine if the installation composts any solid waste other than yard waste. Verify that the installation has obtained a permit. Verify that the installation meets the provisions of the permit including, but not limited to, those in all of the following categories, where applicable: - required equipment - storage capacity - sources, types, and quantities of wastes to be processed - air quality protection - wastewater treatment - fire protection - surplus compost disposal.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-26. Installations that compost solid waste must meet specific operating requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.16(1)(b)(2)).	Verify that a properly trained supervisor is onsite at the composting facility at all times during operating hours. Verify that composting facility operating hours are posted on signs at the entrance. Verify that access to the composting facility is limited to operating hours. Verify that the composting facility is maintained in a clean and sanitary condition and meets all of the following standards: - solid waste is confined to the unloading area - the amount of solid waste stored does not exceed the permitted storage capacity - the unloading area is free of dust and nuisances - putrescible materials and rubbish are handled to minimize odors and prevent insect or rodent infestation - insect/rodent control measures are applied as needed - employee sanitary facilities are available, clean, and in good repair. Verify that the compost produced is nonpathogenic, free of offensive odors, biologically and chemically stable, free of injurious components or particles, and able to sustain plant growth. Verify that rejects generated by the composting process are disposed of in accordance with the requirements of this manual.
GROUNDWATER MONITORING	
5-27. Installations that operate landfills equipped with groundwater monitoring systems must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.14).	Determine if the installation operates a landfill which is equipped with a groundwater monitoring system. Verify that the landfill meets the performance requirements of an approved groundwater monitoring program.
SCRAP TIRE MANAGEMENT	
5-28. Retail tire dealers must meet specific recordkeeping requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.19(3)).	Determine if there are any retail tire dealers on installation premises. Verify that each retail tire dealer is doing all of the following: - collecting the required tire management fee - keeping accurate records of new tires sold - reporting total sales to the Division quarterly.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-29. Installations that generate scrap tires must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.19(4) and (6)).	Determine if the installation generates scrap tires. Verify that the installation has a Scrap Tire Generator Identification Number (ID No.) for each generation location. Verify that the installation never stores accumulations of more than 100 scrap tires for more than 90 days, unless they are stored at a solid waste disposal site that has a permit authorizing scrap tire storage. Verify that the generation facility meets one of the following requirements: - generates less than 100 tires per month and transports its own scrap tires - consigns scrap tire shipments to a carrier that holds a valid Scrap Tire Carrier Permit. Verify that the installation completes a manifest for each shipment of scrap tires sent to an end user or to an approved processing or disposal facility. Verify that the installation keeps manifest copies for 3 yr. Verify that the installation reports to the Division any carrier who fails to return a manifest within 30 days of pickup.
5-30. Installations that operate scrap tire processing, sorting, and disposal facilities must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.19(7); OGCA 12-8-40 -.1(b)).	Verify that all scrap tire processing and sorting facilities on installation premises have been approved by the Division. Determine if the installation operates a solid waste disposal facility that accepts scrap tires. Verify that the disposal facility has a valid Solid Waste Handling Permit, and meets any city/county requirements regarding tire disposal.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SHREDDING/ BALING/ MATERIALS RECOVERY FACILITIES	
5-31. Installations that engage in recovery of materials from solid waste must meet specific permit requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.09(1)(a) and (b), and 391-3-4.09(2)).	Determine if the installation engages in shredding, baling, or the recovery of materials from solid waste. Verify that the installation has obtained a permit. Verify that prior to being opened for operation, all shredding, baling, and material recovery facility construction and modification projects are certified with the Division. Verify that the recovery facility meets the provisions of the permit including, but not limited to, those in all of the following categories, where applicable: - required equipment - storage capacity limitations - sources, types, and quantities of wastes to be processed - air quality protection - wastewater treatment - fire protection - waste disposal.
5-32. Installations that engage in the recovery of materials from solid waste must meet specific operating requirements (RGDNR, Chapter 391-3-4, Sections 391-3-4-.09(1)(a)(3) and 391-3-4-.09(1)(c)).	Verify that a properly trained supervisor is onsite at the facility at all times during operating hours. Verify that facility operating hours are posted on signs at the entrance. Verify that access to the facility is limited to operating hours. Verify that the facility is maintained in a clean and sanitary condition and meets all of the following standards: - solid waste is confined to the unloading area - the amount of solid waste stored does not exceed the permitted storage capacity - the unloading area is free of dust and nuisances - putrescible materials and rubbish are handled to minimize odors and prevent insect or rodent infestation - insect/rodent control measures are applied as needed - employee sanitary facilities are available, clean, and in good repair. Verify that wastewater is treated using Division approved methodology. Verify that air contaminant emissions do not exceed state air quality standards.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-32. (continued)	Verify that all bales produced are uniform in size and shape, are easily handled by facility equipment, and can withstand transportation and handling. Verify that shredded material and baled waste generated by the facility are disposed of in accordance with the requirements of this manual.
TRANSPORTATION OF SPECIAL SOLID WASTE	
5-33. Installations that transport special solid waste must meet specific requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.10(1)(d)).	Determine if the installation generates or transports special solid waste. Verify that all shipments of special solid waste are accompanied by a Special Solid Waste Manifest from the time that they leave the generator until they reach the ultimate disposal facility. Verify that the designated disposal facility listed on each manifest has a permit to handle special solid waste.
SOLID WASTE THERMAL TREATMENT FACILITIES	

5-34. Solid waste thermal treatment facilities must be constructed and operated to meet specific design and operation requirements in compliance with the Solid Waste Handling Permit (RGDNR, Chapter 391-3-4, Sections 391-3-4 -.08(1)(a) and (b), and 391-3-4-.08(2)(a) and (b)).	Determine if the installation operates any solid waste thermal treatment facilities, including those using an Air Curtain Destructor (ACD).
	
	Verify that each facility has been constructed according to the provisions of an approved design and operational plan and the conditions of a Solid Waste Handling Permit.
	
	Verify that prior to being opened for operation, all thermal treatment facility construction and modification projects are certified with the Division.
	
	Verify that the installation meets the operational and maintenance requirements of the design plan including, but not limited to, those in all of the following categories, where applicable:
	
	- for ACD operations:
	  - facility location, including separation from occupied dwellings
	  - storage areas and maximum storage capacities
	  - allowable types of waste
	  - air pollution control
	  - ash/residue disposal
	  - fire protection
	- for all other thermal treatment facilities:
	  - storage areas and maximum storage times and capacities
	  - sources, types, and amounts of solid waste to be processed

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
5-34. (continued)	- ash/residue analysis and quality control - air pollution control - wastewater discharge/treatment - fire protection.
5-35. Installations that operate ACD must meet specific performance requirements (RGDNR, Chapter 391-3-4, Section 391-3-4 -.08(2)(a)(4) and 391-3-4-.08(2)(c)).	Verify that a properly trained and certified supervisor is onsite at all times during operating hours. Verify that no smoke emissions that exceed 20 percent opacity are produced during operation of the ACD except during the ignition period specified in the design plan or permit. Verify that the installation meets all of the following ash/residue handling requirements: - combustion time and temperature are sufficient to produce a satisfactory residue - residues are promptly disposed of in a landfill operation or are otherwise handled as allowed by the permit - ashes are not allowed to build up on the combustion pit to higher than 1/3 the pit depth or to the point where combustion is impeded, whichever comes first. Verify that access to the ACD facility is restricted to prevent unauthorized storage or disposal of wastes and to prevent injury during operation. Verify that the the ACD and affiliated equipment are routinely inspected and maintained in proper working order. Verify that storage areas are inspected to exclude unauthorized wastes and minimize fire hazards.
5-36. Installations that operate solid waste thermal treatment facilities other than ACD, must meet specific performance requirements (RGDNR, Chapter 391-304, Section 391-3-4 -.08(1)(a)(2) and 391-3-4-.08(1)(c)).	Verify that a properly trained and certified supervisor is onsite at all times during operating hours. Verify that facility operating hours are posted on signs at the entrance, and that access to the facility is limited to those operating hours. Verify that the facility is maintained in a clean and sanitary condition and meets all of the following standards: - solid waste is confined to the unloading area - the amount of solid waste stored does not exceed the permitted storage capacity - the unloading area is free of dust and nuisances - putrescible materials and rubbish are handled to minimize odors and prevent insect or rodent infestation - insect/rodent control measures are applied as needed - employee sanitary facilities are available, clean, and in good repair. Verify that the installation has a plan for excluding prohibited wastes.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

5-36. (continued)	Verify that the installation meets all of the following ash/residue handling requirements:
	
	- combustion time and temperature are sufficient to produce a satisfactory residue, essentially free of odors and unstable organic matter
	- ash/residue is sampled and analyzed according to a Director approved plan and at all of the following times:
	  - prior to initial disposal of the ash/residue
	  - at a minimum, monthly for the first 6 mo of facility operation and annually thereafter
	- fly ash and bottom ash are sampled and analyzed separately
	- ash/residue found to be hazardous are disposed of as hazardous waste
	- nonhazardous residues are disposed of in a municipal solid waste landfill that have a liner and leachate collection system.
	
	Verify that wastewater is discharged into a Division approved treatment system before final release.
	
	Verify that the installation meets all of the following fire control requirements:
	
	- fire control equipment is available near the storage and charging area and elsewhere as needed
	- additional fire fighting equipment is available for emergencies.
	
	Verify that the installation keeps daily records, by actual weight or other approved method, of all waste received at the facility, and retains records for at least 3 yr.

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle D (RCRA-D) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
CLOSURE AND POSTCLOSURE CARE	
5-37. Installations that operate solid waste disposal facilities must meet specific facility closure requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.11).	Determine if the installation currently operates or has previously operated a solid waste disposal facility. Verify that the facility meets one of the following conditions: - for currently operating facilities, the installation has a permit, an approved closure plan, and meets closure plan requirements upon closure of the facility - for nonoperating facilities, the installation has closed the facility according to the requirements of an approved closure plan and met the other requirements of the closure portion of this section. Verify that the installation notifies the Director in all of the following circumstances: - for any facility earmarked for final closure: notification within 30 days of receiving the final load of waste at that facility - for any facility which has not received waste for more than 180 days: immediate notification.
5-38. Installations that have closed solid waste disposal facilities must meet specific postclosure care requirements (RGDNR, Chapter 391-3-4, Section 391-3-4-.12).	Determine if the installation currently operates or has previously operated and now closed a solid waste disposal facility. Verify that the facility meets one of the following conditions: - for currently operating facilities, the installation has a permit, an approved postclosure care plan, and meets plan requirements after closure of the facility - for closed facilities, the installation conducts postclosure care for at least 30 yr after closure according to the requirements of an approved postclosure care plan and meets the other requirements of the postclosure care portion of this section. Verify that the installation notifies the Division within 5 days of obtaining monitoring results that exceed standards or that indicate a threat to human health or the environment. Verify that postclosure use of facility property does not disturb the integrity of the final cover, liner(s), or other components of the containment system or the function of any monitoring systems, except with Division approval. Verify that if the installation intends to remove wastes and waste residues, the liner, or any contaminated soils from a landfill, Division approval is obtained.

INSTALLATION:	COMPLIANCE CATEGORY: Resource Conservation and Recovery Act Subtitle D (RCRA-D) Georgia Supplement	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

SECTION 6

RESOURCE CONSERVATION AND RECOVERY ACT,

SUBTITLE I

Georgia Supplement

SECTION 6

RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE I (RCRA-I)

Georgia Supplement

This protocol covers underground storage tank (UST) system requirements that are in addition to the Federal regulations adopted by reference by the State of Georgia. The following Federal underground storage tank regulations as amended in 1990 have been adopted:

40 CFR 280.10(c) and (d); Deferrals
40 CFR 280.11; Interim Prohibition for Deferred UST Systems
40 CFR 280.12 and 280.92; Definitions
40 CFR 280.20; Performance Standards for New UST Systems
40 CFR 280.21; Upgrading of Existing UST Systems
40 CFR 280.22; Notification Requirements
40 CFR 280, Subpart C; General Operating Requirements
40 CFR 280, Subpart D; Release Detection
40 CFR 280, Subpart E; Release Reporting, Investigation, and Confirmation
40 CFR 280, Subpart F; Release Response and Corrective Action for UST Systems Containing Petroleum (including addenda by the State of Georgia listed in the Protocol)
40 CFR 280, Subpart G; Out-of-Service UST Systems and Closure.

Definitions

These definitions were obtained from the *Rules of Georgia Department of Natural Resources* (RGDNR), Chapter 391-3-15, Underground Storage Tank Management.

- *Director* - the Director of the Environmental Protection Division (EPD) of the Department of Natural Resources.

- *Release* - any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an UST into groundwater, surface water, or subsurface soils.

- *Underground Storage Tank or UST* - any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. This term does not include any of the following or pipes connected to the following:
  1. farm or residential tanks of 1100 gallons (gal) or less capacity used for storing motor fuel for noncommercial purposes
  2. tanks used for storing heating oil for consumption on the premises where stored
  3. septic tanks
  4. pipeline facilities (including gathering lines) meeting the following regulations:
     a. *The Natural Gas Pipeline Safety Act of 1968* (49 USC App. 1671, et seq.)
     b. *The Hazardous Liquid Pipeline Safety Act of 1979* (49 USC App. 2001, et seq.)
     c. which is an intrastate pipeline facility regulated under state laws comparable to the provisions of *The Natural Gas Pipeline Safety Act of 1968* or *The Hazardous Liquid Pipeline Safety Act of 1979*.

5. surface impoundment, pit, pond, or lagoon
6. stormwater or wastewater collection systems
7. flow-through process tanks
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations
9. storage tanks situated in an underground area (such as a basement, cellar, mine-working, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor
10. UST systems holding hazardous wastes listed or identified under Subtitle C of the *Solid Waste Disposal Act*, or a mixture of such hazardous waste and other regulated substances
11. wastewater treatment tank systems that are part of a wastewater treatment facility regulated under Section 402 or 307 (b) of the *Clean Water Act*
12. equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tank and electrical equipment tank
13. UST systems whose capacity is 110 gal or less
14. UST systems that contain a "de minimis" concentration of regulated substances
15. emergency spill or overflow containment UST systems that are expeditiously emptied after use
16. pipes connected to any tank which is described in this definition as an exception.

- *UST System or Tank System* - a UST, connected underground piping, underground ancillary equipment and containment system, if any.

RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE I

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
UST System Release Response and Corrective Action	6-1

COMPLIANCE CATEGORY: Resource Conservation and Recovery Act - Subtitle I (RCRA-I) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

UST SYSTEM RELEASE RESPONSE AND CORRECTIVE ACTION
 	
6-1. Installations must meet specific requirements for corrective action plan design and implementation (RGDNR, Chapter 391-3-15, Section 391-3-15-.09(2)).
	(NOTE: The following rules do not apply if it can be demonstrated that existing public or nonpublic water systems or surface waters are upgradient from a contaminant plume or are not hydraulically interconnected with the contaminant plume.)
	
	Verify that, in addition to Federal corrective action requirements, installations specify target cleanup concentrations for contaminated soils and groundwater in the corrective action plan.
	
	Verify that installations perform the following cleanup objectives at corrective action sites where a point of withdrawal for a public water system exists within 3 miles (mi) (or, for a nonpublic water system, within 1/2 mi) of the contaminant plume boundary:
	
	- remediate soil contamination that exceeds 100 milligrams (mg)/ kilogram (kg) ppm total petroleum hydrocarbons (TPH) or 20 mg/ kg ppm total benzene, toluene, ethylbenzene, and xylene (BTEX)
	- remove visible free product
	- remediate groundwater contamination that exceeds Federal and state maximum contaminant levels (MCLs) or alternate concentration limits as established by the Director.
	
	Verify that installations perform the following cleanup objectives at corrective action sites which are not within the limits of water systems as defined above:
	
	- remediate soil contamination that exceeds 500 mg/ kg ppm TPH or 100 mg/ kg ppm total BTEX
	- remove visible free product
	- delineate the full extent of groundwater contamination
	- perform the following, if deemed necessary by the EPD:
	  - monitor contaminant plume movement
	  - remediate groundwater contamination.
	
	(NOTE: The Director may approve alternate corrective action standards or determine that more stringent cleanup concentrations are necessary to adequately protect human health and the environment.)

INSTALLATION:	COMPLIANCE CATEGORY: Resource Conservation and Recovery Act Subtitle I (RCRA-I) Georgia Supplement	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

SECTION 7

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) / SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (SARA) AND RCRA CORRECTIVE ACTIONS

Georgia Supplement

SECTION 7

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT / SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (CERCLA/SARA) AND RCRA CORRECTIVE ACTIONS

Georgia Supplement

Regulations promulgated under the authority of CERCLA/SARA are applicable to installations in Georgia. Georgia statutes require release reporting of any oil or hazardous materials. Refer, also, to Protocol 7 in the U.S. ECAS Manual for Federal, Army, and DOD requirements.

Definitions

These definitions were obtained from Code of Georgia, Title 12, Chapter 14, Section 12-14-1.

- *Hazardous Substance* - any substance designated pursuant to the Federal *Clean Air Act, Clean Water Act, Solid Waste Disposal Act*, and the *Toxic Substance Control Act.*

- *Oil*- includes but is not limited to gasoline, crude oil, fuel oil, diesel oil, lubricating oil, sludge, oil refuse, oil mixed with wastes, and any other petroleum related product.

- *Person* - includes an individual, trust, firm, joint-stock company, corporation, partnership, association, county, municipal corporation, political subdivision, interstate body, the state and any agency or authority thereof, and the Federal government and any agency thereof.

- *Reportable Quantity* - those listed in 40 CFR 302.

- *Spill or Release* - the discharge, deposit, injection, dumping, spilling, emitting, releasing, leaking, or placing of any hazardous material into the air or into or on any land or water of the state, except from an underground storage tank and all plumbing and piping relating thereto or except high-level or low-level radioactive waste from a Federally licensed nuclear facility or as authorized by state or Federal law or a permit from the division. This includes the discharge of oil into waters of this state which will cause a significant film or sheen upon or discoloration of the surface of such waters or adjoining shorelines or cause a sludge or emulsion to be disposed beneath the surface of such waters or upon adjoining shorelines.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT/SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (CERCLA/SARA) AND RCRA CORRECTIVE ACTIONS

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
All Installations	7-1

COMPLIANCE CATEGORY: Comprehensive Environmental Response, Compensation, and Liability Act/ Superfund Amendment and Reauthorization Act (CERCLA/SARA) and RCRA Corrective Actions Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS **7-1.** Any installation personnel having control over any oil or hazardous material who has knowledge of a spill or release must immediately notify the Emergency Operations Center as soon as that person knows of the spill or release (Code of Georgia, Title 12, Chapter 14, 12-14-3(a)).	Verify that any oil spill or release is immediately reported to the Emergency Operations Center (800 241-4113) as soon as there is knowledge of the spill or release. Verify that any spill or release of a hazardous substance in a quantity equal to or exceeding its reportable quantity or of an unknown quantity is immediately reported to the Emergency Operations Center (800 241-4113) as soon as there is knowledge of the spill or release.

INSTALLATION:	COMPLIANCE CATEGORY: Comprehensive Environmental Response, Comprehensive, and Liability Act / Superfund Amendment and Reauthorization Act and RCRA Corrective Actions Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 8

TOXIC SUBSTANCES CONTROL ACT

Georgia Supplement

SECTION 8

TOXIC SUBSTANCES CONTROL ACT

Georgia Supplement

The transportation of Polychlorinated Biphenyls (PCBs) are regulated under Georgia's Transportation of Hazardous Materials requirements. Please, see Protocol 17, Hazardous Materials Management, and the U.S. ECAS manual.

INSTALLATION:	COMPLIANCE CATEGORY: TOXIC SUBSTANCES CONTROL ACT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 9

FEDERAL INSECTICIDE, FUNGICIDE, & RODENTICIDE ACT (FIFRA)

Georgia Supplement

SECTION 9

FEDERAL, INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

Georgia Supplement

Definitions

The following definitions are taken from the following Georgia statutes:

- Georgia Code Ann., Title 5, Section 5-1504
- Georgia Code Ann., Title 5, Section 5-1504a
- Georgia Code Ann., Title 84, Section 84-3402.

- *Beneficial Insects* - those insects which, during their lifecycles, are effective pollinators of plants, are parasites or predators of pests, or are otherwise beneficial.

- *Certified Applicator* - any individual who is certified under this article to use or supervise the use of any restricted-use pesticide restricted to use by certified applicators or any state-restricted pesticide use restricted to use by certified applicators.

- *Commercial Applicator* - any individual who meets either of the following conditions:
  1. he/she uses or supervises the use of any restricted-use pesticide restricted to use by certified applicators or any state-restricted pesticide use restricted to use by certified applicators, and he/she is not a private applicator
  2. he/she uses or supervises the use of any other pesticide for a pesticide contractor, as an employee or otherwise.

- *Commissioner* - the Commissioner of Agriculture.

- *Defoliant* - any substance or mixture of substances intended for causing the leaves or foliage to drop from a plant, with or without causing abscission.

- *Desiccant* - any substance or mixture of substances intended for artificially accelerating the drying of plant tissue.

- *Label* - the written, printed, or graphic matter on or attached to the pesticide or device or any of its containers or wrappers.

- *Labeling* - the label and all other written, printed or graphic matter that accompanies the pesticide or device at any time or to which reference is made on the label or in literature accompanying the pesticide or device, except for current official publications of the U.S. Environmental Protection Agency (USEPA), U.S. Department of Agriculture, U.S. Department of Interior, U.S. Department of Health and Human Services, state experiment stations, state agricultural stations, and other Federal/state agencies authorized to conduct pesticide research.

- *Pest* - any insect, rodent, nematode, fungus, or weed; or any other form of terrestrial or aquatic plant or animal life or virus, bacterium, or other microorganism, except viruses, bacteria or other microorganisms on or in living man or other living animals which the USEPA or the Commissioner declares to be a pest.

- *Pesticide* - any substance or mixture of substances intended for any of the following uses:
  1. preventing, destroying, repelling, or mitigating any pests
  2. use as a plant regulator, defoliant, or desiccant.

- *Pesticide Contractor* - any person who engages in the business of contracting for the application of any pesticide to the lands of another.

- *Plant Regulator* - any substance or mixture of substances, intended through physiological action for accelerating or retarding the rate of growth or rate of maturation or for otherwise altering the behavior of ornamental or crop plants or the produce thereof; but not including plant nutrients, trace elements, nutritional chemicals, plant inoculants, and soil amendments.

- *Private Applicator* - any individual who purchases, uses, or supervises the use of any restricted-use pesticide restricted to use by certified applicators or any state-restricted pesticide use restricted to use by certified applicators, for purposes of producing any agricultural or forestry commodity on property owned or rented by him or his employer or, if applied without compensation other than the trading of personal services between producers of agricultural and forestry commodities, on the property of another person.

- *Restricted Use Pesticide* - any pesticide whose label bears one or more uses which have been classified as restricted by the USEPA.

- *State Restricted Pesticide Use* - any pesticide use for which the Commissioner requires additional restrictions.

- *Structural Pest Control* - control of wood-destroying organisms or fumigation; the identification of infestations or infections; the making of inspections; the use of pesticides, including insecticides, repellents, rodenticides, fumigants, and other substances, and the use of mechanical devices of structural modifications under whatever name known for the purpose of preventing, controlling, and eradicating insects, vermin, rodents, and other pests in household structures, commercial buildings, and other structures, including adjacent outside areas; and all phases of fumigation, including treatments of products by vacuum fumigation and the fumigation of railroad cars, trucks, ships, and airplanes.

- *Under the Direct Supervision of a Certified Applicator* - the application of a pesticide by a competent person acting under the instructions and control of a certified applicator who is available if and when needed, even though such certified applicator is not physically present at the time and place the pesticide is applied.

- *Wildlife* - all living things that are not human, nor domesticated, nor pests; including, but not limited to, mammals, birds, and aquatic life.

FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
All Installations	9-1
Licensing	9-2 and 9-3
Irrigation Systems	9-4
Structural Pest Control	9-5

COMPLIANCE CATEGORY: FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ALL INSTALLATIONS	
9-1. Installations that apply or use pesticides must meet specific operating requirements (Georgia Code Annotated (GCA), Part V, Chapter 5-15, Section 5-1506(b) and Chapter 5-15a, Sections 5-1511a(a) and 5-1518a).	Verify that installation personnel that handle, apply, or use pesticides do not commit any of the following acts: - distribute a pesticide to an individual who lacks the permit or certification required for its use - detach, alter, deface or destroy, wholly or in part, pesticide labeling - use a pesticide in a way inconsistent with its labeling or its USEPA or Georgia state registration, or in violation of USEPA or state restrictions on its usage - handle, transport, store, display, or distribute pesticides in ways that endanger humans, the environment, or food, feed, or any other products - dispose of, discard, or store pesticides or pesticide containers in ways that cause injury to humans, vegetation, crops, livestock, wildlife, or beneficial insects, or that pollute any water supply or waterway - use any pesticide inconsistent with the labeling, USEPA or Georgia state registration, or in violation of USEPA or Georgia state restrictions on the use of that pesticide - apply known ineffective or improper pesticides - operate faulty or unsafe equipment - operate in a faulty, careless, or negligent manner.
LICENSING	
9-2. Installations that conduct or contract for pesticide applications must meet specific licensing requirements (GCA, Part V, Chapter 5-15a, Sections 5-1507a and 5-1508a).	Verify that if the installation hires a pesticide contractor to apply pesticides on installation premises, then all of the following requirements are met: - each pesticide contractor hired by the installation has a valid pesticide contractor's license - each individual who applies a pesticide either has, or is working under the direct supervision of an individual who has, a certified commercial pesticide applicator's license valid for the category of pest control in which he/she is engaged. Verify that any installation personnel that use restricted-use pesticides or state-restricted pesticides (see Appendix 9-1) are either licensed or under direct supervision of an individual who is licensed for the pesticide or the pesticide use. (NOTE: An employee of a government agency must meet the certified commercial applicator license requirements, but is issued a limited license valid only for work done for that government agency. DOD certification for the use and purchase of restricted-use pesticides is considered certification in the state for the purchase, use, or supervision of use of restricted-use pesticides (including state-restricted) on United States owned or controlled lands.)

COMPLIANCE CATEGORY: FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA) Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
9-3. Installation personnel that are licensed as certified pesticide applicators must meet specific requirements (GCA, Part V, Chapter 5-15a, Section 5-1514a; Rules of Georgia Department of Agriculture, Pesticide Use and Application, Chapter 40-21-4, Section 40-21-4-21-5).	Verify that pesticide applicator licenses are renewed within 60 days of their expiration date. Verify that all individuals who are licensed pesticide applicators keep, for a minimum of 2 years, records that include all of the following information: - date and time of application - name of person for whom applied - location of application site - crop or target to which applied - acreage, size of area treated, or total amount of pesticide applied - type of equipment used - name of applicator - notes of any unexpected occurrences, such as spillage, exposure of humans or nontarget animals, or drift, and corrective/emergency actions taken - names, concentrations, and quantities of all pesticides disposed of and the manner of disposal.
IRRIGATION SYSTEMS	
9-4. Installations that operate irrigation systems must meet specific requirements (Rules of Georgia Department of Agriculture, Pesticide Use and Application, Chapter 40-23-2).	Determine if the installation operates any irrigation systems that are designed or used for the application of fertilizers, pesticides, or chemicals. Verify each such system is equipped with an anti-syphon device consisting of all of the following components, all of which are free of corrosion and buildup and are operative at all times during system operation: - a functional check valve - a low pressure drain - a vacuum relief valve.
STRUCTURAL PEST CONTROL	
9-5. Installations that engage in structural pest control must meet specific requirements (GCA, Chapter 84-34, Section 84-3409).	Verify that if the installation hires out structural pest control work, the person or firm hired is licensed by the state. Verify that if the installation conducts its own structural pest control work, it meets the applicable pesticide control requirements listed in this protocol.

Appendix 9 - 1

Georgia's Restricted-Use Pesticide List

(Source: Compiled by the Georgia Department of Agriculture, Pesticide Registration Division, 1992-93)

Application of the following pesticides must be licensed.

CORPORATIONS	PRODUCT NAME	NUMBERS
AGTROL CHEM PROD	FLO TIN 4L	55146-13
ALLIED CORP	CREOSOTE-COAL TAR CREOSOTE OIL CREOSOTE OIL-24-CB	218-136 218-609 218-132
AMERIBROM INC	66-33 METABROM 99 67-33 75-25 98-2	8622-12 8622-17 8622-13 8622-15 8622-12
AMERIBROM INC	METABROM 100	8622-16
AMERICAN CYANAMID	COUNTER SYSTEMIC INS THIMET 20G THIMET 15G COUNTER 20CR	241-238 241-257 241-145 241-314
AMVAC CHEMICAL	PHOSDRIN IPA 4 PHOSDRIN 4EC PCNB DISULFOTON GRANULES 6.5-6.5 PCNB DISULFOTON GRANULES 6.5-6.6	5481-114 5481-412 5481-415 5481-415
APPLIED RESEARCH GROUP	CCA TYPE C 50% CHROM COPPER ARSENATE	48706-1
ARISTECH CHEMICAL	CREOSOTE SOLUTION CREOSOTE OIL CREOSOTE OIL	57344-5 57344-1 57344-1

CORPORATIONS	PRODUCT NAME	NUMBERS
ASGROW FLORIDA CO	METHOMYL 5G (CORN) ASGROW MBC 2-1 SOIL FUMIGANT MBC 98-2 PREPLANT SOIL MBC 67-33 PREPLANT SOIL PARATHION 2% BAIT MBC 67-33 MBC 98-2 PRE-PLANT SOIL	14775-48 14775-20 5785-22-14775 5785-24-14775 51036-155-14775 3377-17-14775 3377-16-14775
ATOCHEM NORTH AMERICA	PENNCAP-M	4581-292
AVITROL CORP	AVITROL CONCENTRATE AVITROL WHOLE CORN AVITROL WHEAT AVITROL MIXED GRAIN AVITROL DOUBLE STRENGTH WHOLE CORN AVITROL DOUBLE STRENGTH CORN CHOPS AVITROL CORN CHOPS	11649-10 11649-7 11649-1 11649-4 11649-8 11649-5 11649-6
BELL LABORATORIES	ZP TRACKING POWDER ZP RODENT BAIT AG ZP RODENT BAIT AG	12455-16 12455-18 12455-17
BERNARDO CHEM	GASTOXIN FUMIGATION	43743-3
BERNARDO CHEMICAL	GASTOXIN FUMIGATION TABLETS GASTOXIN FUMIGATION PELLETS PHOSTEX FUMIGATION TABLETS PHOSTEX FUMIGATION PELLETS	43743-1 43743-2 43743-1-1015 43743-2-1015
BERNUTH LEMBCKE	B L COAL TAR CREOSOTE	2077-1
BORDERLAND PRODUCTS	BORDERLAND BLACK SEED PROTECTOR	7832-4
C J MARTIN	6% LINDANE WETTABLE POWDER	299-149

CORPORATIONS	PRODUCT NAME	NUMBERS
CHAPMAN CHEMICAL	WOODGUARD CCA-50 TYPE C POL-NU PAK	1022-552 1022-240
CHEM NUT	ETHYL-METHYL PARATHION 6-3 METHYL PARATHION 4 EC METHYL PARATHION 6 EC PARATHION 10 G	51036-19-37686 51036-18-37686 51036-88-37686 51036-43-37686
CHEM PAR CHEMICAL	RIDALL ZINC	7173-195
CHEMICAL SPECIALTIES	CCA TYPE-C WOOD 70% SODIUM DICHROMATE CCA-A 50% CONCENTRATE ARSENIC ACID 757	10356-13 10356-7 10356-8 10356-18
CHEMPAR/DIV OF LIPHA	ROZOL BLUE TRACKING POWDER	7173-172
CHEMPAR/DIV OF LIPHA	RIDALL-ZINC	7173-197
CHEVRON CHEMICAL	INDUSTRIAL WEED & GRASS MONITOR 4 SPRAY MONITOR 4 SPRAY	239-2186 239-2404 SLN GA-860004
CIBA GEIGY CORP	CURACRON 8E CURACRON 6E SWAT TM TRIUMPH 4E CYCLE HERBICIDE D.Z.N. DIAZINON AG500 D.Z.N. DIAZINON 50W D.Z.N. DIAZINON 14G ATRAZINE 4L AATREX 80W HERBICIDE ATRATOL 4LC AATREX NINE HERBICIDE ATRATOL 90 HERBICIDE BICEP 6L D.Z.N. DIAZINON AG 500 BICEP LITE	100-699 100-599 100-668 100-643 100-716 GA=880007 GA=880008 100-469 100-497 100-439 100-535 100-585 100-622 100-645 100-461 100-731
CIBA GEIFY CORP	AATREX 4L HERBICIDE	100-497

CORPORATIONS	PRODUCT NAME	NUMBERS
COOPERS ANIMAL HEALTH	THIONIUM SHAMPOO WITH LINDANE	59-192
COURTAULDS COATINGS	MICRON 44 PREMIUM COPOLYMER	2693-127
DEGESCH AMERICA	DEGESCH PHOSTOXIN DEGESCH PHOS COATED DEGESCH PHOS NEW COATED TABLETS-R DEGESCH FUMI-STRIP DEGESCH PHOSTOXIN PREPAC DEGESCH MAGTOXIN PELLETS DEGESCH FUMI-CEL PLATE DEGESCH CALCIUM G-FUMIGANT MAGTOXIN PELLETS-PREPAC DEGESCH CALCIUM CYANIDE A-DUST DEGESCH PHOSTOXIN COATED PELLETS MAGTOXIN PREPAC SPOT FUMIGANT	40285-13 40285-2 40285-1 40285-8 40285-14 40285-10 40285-8 40285-5 SLN GA-840001 40285-4 40285-3 40285-12
DELFIA INC	ARENA GRASS HERB. ARENA GRASS ME	524-314-55765 524-344-55765
DOUGLAS CHEMICAL	PHOSTEK FUMIGATION	43743-3-1015
DOW CHEMICAL CO	ACCESS HERBICIDE TELONE II TELONE II FUMIGANT VIKANE GAS FUMIGANT TELENE C-17 TORDON 101 WEED & BRUSH KILLER TORDON K HERBICIDE TORDON 2K PELLETS HERBICIDE TORDON 10K PELLETS HERBICIDE TORDON 1 PLUS 2 MIXTURE HERBICIDE	464-576 464-511 SLN GA-850001 464-236 464-379 464-306 464-421 464-333 464-320 464-576

CORPORATIONS	PRODUCT NAME	NUMBERS
DOWELANCO	VIKANE GAS FUMIGANT TORDON 101 MIXTURE GRAZON P+D	62719-4 62719-5 62719-182
DREXEL CHEMICAL	LINDANE 20% DREXEL METHYL PARATHION 4E	728-70-19713 19713-37
E I DUPONT DE NEMOURS	ASANA PHOSDRIN 10.3 WS ASANA XL INSECTICIDE PHOSDRIN 4EC INSECTICIDE AZODRIN 5 BLADEX 4 HERBICIDE EXTRAZINE 90 DF HERBICIDE EXTRAZINE 4L HERBICIDE BLADEX 80 W HERBICIDE DUPONT PAY-OFF INSECTICIDE PYDRIN INSECTICIDE VYDATE L INSECT/NEMA LANNATE L INSECTICIDE CONQUEST 4L HERBICIDE BLADEX 90 DF HERBICIDE LANNATE L INSECTICIDE VYDATE C-LV	352-502 352-473 352-515 352-471 352-458 352-470 352-501 352-489 352-468 352-510 352-485 352-372 352-370 201-427 352-495 SLN GA-780030 352-532
FARMLAND INDUSTRIES	LIQUID ATRAZINE 4L	1990-381
FMC CORP	FURADAN 15G PHOSKIL SPRAY AQUA 8 PARATHION FURADAN 4F CAPTURE, 2EC DRAGNET TC METHYL PARATHION 2 THIODAN 3EC AMMO 2.5 ED POUNCE 25WP POUNCE 3.2EC AMMO WSB INSECTICIDE	279-3023 279-336 279-1611 279-2876 279-3069 279-3014 279-2149 279-3027 279-3051 279-3014 279-3084
FORSHAW CHEMICAL	PENTACON-40	7234-11

CORPORATIONS	PRODUCT NAME	NUMBERS
GOWAN COMPANY	PROKIL ETHYL METHYL PARATHION 6-3E	10163-3
	METHYL PARATHION 4EC	10163-121
	AZINPHOS-M 2EC	10163-80
	AZINPHOS-M 50WP	10163-78
GREAT LAKES CHEMICAL	CHLOR-O-PIC	5785-17
	BROM-O-SOL	5785-13
	BROM-O-GAS	5785-42
	BROM-O-GAS	5785-55
	MATH-O-GAS 100	5785-11
	METH-O-GAS	5785-41
	TERR-O-CIDE 98	5785-22
	TERR-O-CIDE GAS 67	5785-24
GRIFFIN CORP	DU-TER FLOWABLE 30	1812-277
	DU-TER WETTABLE POWDER	1812-275
HELENA CHEMICAL	HELENA PARATHION 25W	5905-255
	HELENA PEACH SPRAY	5905-284
	HELENA PARATHION-METHYL 6-3	5905-225
HENDRIX & DAIL	MBC SOIL BUMIGANT	8853-1
	MBC CONCENTRATE SOIL FUMIGANT	8853-2
	MBC-33 SOIL FUMIGANT	8853-3
	HD-PIC FUMIGANT	8853-4
	METHYL BROMIDE 99.5%	8536-12-8853
	TRI-CON 75/25	11220-08-8853
	PIC-BROM 20	58266-01-8853
HI-YIELD BROMINE	66-33	8622-12-40926
	67-33 PREPLANT SOIL FUMIGANT	8622-13-40926
	70-30	8622-14-40926
	75-25 PREPLANT SOIL FUMIGANT	8622-15-40926
	98-2 CONTAINS 2% CHLOROICRIN	8622-12-40926
HICKSON CORP	WOLMANAC CONCENTRATE 50%	62190-2
	CCA TYPE C CONC. 50% WOOD PRES.	62190-2
	ARSENIC ACID 75%	62190-7

CORPORATIONS	PRODUCT NAME	NUMBERS
HMS INC	PIC-BROM-20 HMS METHYL BROMIDE 99.5% PIC-BROM-33 TRI-CON 75/25	58266-03-43480 8536-12-43480 8536-5-43480 1220-07-43480
HOECHST-ROUSSEL	SCOUT X-TRA INSECTICIDE SCOUT INSECTICIDE HOELON 3EC HERBICIDE ILLOXAN 3EC HERBICIDE	34147-3-54382 34147-2-54382 8340-20-54382 8340-20-54382
HOPKINS AGRI	ZINC PHOSPHIDE PELLETS ZINC PHOSPHIDE BAIT	2393-521 2393-185
HY-YIELD BROMINE	METAPICRIN	8622-43-40926
ICI AMERICAS	FORCE 1.5 G INSECT DYFONATE II 20-G CYMBUSH 2E INSECTICIDE AMBUSH 25-W CYMBUSH 3E INSECTICIDE AMBUSH 25-W INSECTICIDE GRAMOXONE SUPER HERBICIDE AMBUSH INSECTICIDE (TRI-STAT E) AMBUSH INSECTICIDE (HELENA) KARATE INSECTICIDE AMBUSH INSECTICIDE (WOOLFOLK) PRELUDE HERBICIDE AMBUSH INSECTICIDE (DIXIE CO) PRELUDE EW HERBICIDE AMBUSH 25W INSECTICIDE AMBUSH 2E INSECTICIDE (COTTON) AMBUSH 2E HERBICIDE (SOYBEANS) STARFIRE HERBICIDE KARATE CSO INSECTICIDE	10182-130 10182-135 10182-64 10182-35 10182-65 10182-110 10182-103 10182-18-13136 10182-18-5905 10182-96 10182-18-769 10182-119 10182-18-45985 10182-134 10182-35 SLN GA-810033 SLN GA-830007 10182-103 10182-331
INTERLUX	TRI-LUX II T	5204-64-2693

CORPORATIONS	PRODUCT NAME	NUMBERS
INTERNATIONAL PAINT	INTERSMOOTH H1SOL INTERSMOOTH COPPER FREE INTERSWIFT A/F	2693-127 5204-64-2693 2693-123
ISK BIOTECH	PENTA PLUS 40 POL-NU TIMPREG	1022-120-50534 1022-240-50534 1022-256-50534
J J MAUGET CO	INJECT-A-CIDE	7946-3
J.T. EATON & CO INC	BLUE A-C TRACKING POWDER	7173-172-56
KOPPERS INDUSTRIES	COAL TAR CRESOSOTE (PRESSURE APPLI) 60/40 CREOSOTE-COAL TAR SOLUTION	61468-1 61468-3
LIPHATECH INC	ROZOL TRACKING POWDER FOR MICE/RATS	7173-113
LIPHATECH INC	ROZOL POWDER (BATS)	SLN GA-780019
MERCK & CO INC.	ZEPHYR 0.15 EC	618-97
MICRO FLO	PARATHION 4 EC ETHYL METHYL 6-3 PARATHION EC METHYL PARATHION 6E METHYL PARATHION 4LB EC PARATHION 10G METHYL PARATHION 7.5EC AZINPHOS METHYL 2EC PARATHION EMULSION 8 PARATHION 15 WP PARATHION 8 CONCENTRATE PARATHION 2% BAIT AZINPHOSMETHYL 35W	51036-22 51036-19 37686-67-51036 51036-18 51036-43 51036-87 51036-76 51036-38 51036-21 9859-280-51036 9859-266-51036 51036-130
MILLER CHEM & FERT	BORER SPRAY	904-185

CORPORATIONS	PRODUCT NAME	NUMBERS
MOBAY CHEMICAL	DISYSTON 8 SYSTEMIC INSECTICIDE	3125-307
	GUTHION 4 FLOWABLE INSECTICIDE	3125-338
	GUTHION 2S INSECTICIDE	3125-123
	PRYFRON 6 INSECTICIDE	3125-339
	DYSYTON 8	3125-307
	GUTHION 2 EMULS INSECTICIDE	3125-102
	DASANIT 15% GRANULAR	3125-213
	DASANIT DI-SYSTON 4-2 SPRAY CONCEN	3125-299
	DI-SYSTON 15% GRAN SYSTEMIC INSECT	3125-172
	FURADAN 4 FLOWABLE INSECTICIDE	279-2876-3125
	GUTHION 2 FLOWABLE	SLN GA-810031
	NEMACUR 3 TURF NEMATICIDE	3125-283
	MONITOR 4 LIQUID	3125-280
	DASANIT SPRAY CONCENTRATE INSECT	3125-163
	BAYTHROID 2 EMULSIFIABLE PYRETHROID	3125-351
	BOLSTAR 6 EMULSIFIABLE INSECTICIDE	3125-321
	FURADAN 15G INSECTICIDE NEMATICIDE	279-3023-3125
	FURADAN 4F INSECTICIDE	279-2876-3125
	GUTHION 3 FLOWABLE	3125-338
	MESUROL 75% WETTABLE POWDER	3125-288
	METASYSTOOOOX-R2 ORNAMENTAL INSECTICIDE	3125-111
MONSANTO CO	BULLET HERBICIDE	524-418
	FREEDOM HERBICIDE	524-422
	LASSO II	524-296
	LASSO	524-314
	LARIAT FLOWABLE HERBICIDE	524-329
	LASSO & ATRAZINE FLOWABLE	524-329
	LASSO MICRO-TECH	524-344
	JUDGE	524-314-9779
	STALL	524-314-34704
	PARTNER	524-403
MOONEY CHEMICALS	M-GARD W320	279-3014-9630
NAUTICAL COATINGS	SEA HAWK BIOCOP	44891-6

CORPORATIONS	PRODUCT NAME	NUMBERS
NOR AM CHEMICAL	TURCAM 2-1/2 G TURCAM DELTIC FUNDAL SP FUNDAL 4EC	45639-100 45639-59 45639-65 45639-73 45639-75
OLYMPIC CHEMICAL	GRANDSLAM	3125-288-59807
OREGON-CALIF. CHEM	GAMMA MEAN 400 GAMMA MEAN L.0	52251-6 52251-6
OSMOSE WOOD PRESERVING	OMOSE 24-12 WOOD PRESERVATIVE SOL OSMOSE K-33-C (50%) WOOD PRESERVA OSMOPLASTIC WOOD PRESERVA. COMMAND OSMOSE K-33-C (72%) WOOD PRESERVA OSMO BRAND WOOD PRESERVA. BONDAGE MITC-FUME/FUNGICIDE FOR WOOD OSMOSE HOLLOW HEART CONCENTRATE TIMBER FUME TIMBERFUME II TIMBERLINE WOOD PRESERVING K-33-A (50%)	3008-28 3008-36 3008-4 3008-17 3008-14 54289-2-3008 3008-8 3008-39 3008-46 3008-4 3008-42
PENNWALT CORP/AG CHEM	PENNCAP M (CHRYSANTHEMUMS)	SLN GA-810024
PESTCON SYSTEMS	FUMITOXIN ALUMINUM PHOSPHIDE BAGS FUMITOXIN NEW COATED TABLETS FUMITOXIN COATED PELLETS	5857-6 5857-1 5857-2
PET CHEMICALS INC	HILLS' VIP HOOKWORM SPRAY	4758-96
PETTIT PAINT CO	ALUMACOAT ANTIFOULANT	8120-49-60061

CORPORATIONS	PRODUCT NAME	NUMBERS
PHOS FUME CHEMICAL	QUICK=PHOS ALUM. PHOS. FUM. BAGS	43568-2
	QUICK-PHOS ALUM. PHOS. FUM. PELLETS	43568-1
	QUICK-PHOS ALUM. PHOS. FUM. TABLETS	43568-3
PLANT PRODUCTS	NICOTINE SMOKE GENERATOR	8241-9
	PLANTFUME 130	8241-10
PLATTE CHEMICAL	PHORATE 20G	34704-259
	CLEAN CROP ENDOCIDE PLUS INSECTICID	279-2089-34704
	CLEAN CROP AZINPHOS M2 EC	46077-2089-34704
	METHYL PARATHION 7.5	34704-72
	CLEAN CROP 6-3 METHYL PARATHION	34704-16
	CLEAN CROP METHYL PARATHION 4-E	34704-10
	PARATHION SULPHUR 2 PEACH SPRAY	769-110-34704
	CLEAN CROP ATRAZINE 4L HERBICIDE	34704-69
	CLEAN CROP ATRAZINE 90WDG HERBICIDE	34704-622
	CLEAN CROP SNIPER 2-E AZINPHOS	34704-691
	STALL MT	524-344-34704
	PARASPRAY 4-E	34704-714
	PARASPRAY 6-3	34704-715
	PARASPRAY 8-E	34704-717
PRENTISS DRUG	PRENTOX LINDANE 20%	655-579
RED PANTHER	RED PANTHER METHYL PARATHION 4LB EC	9779-34-42761
REDDICK FUMIGANTS	BRO-MEAN C-1/4	5785-55-37733
	BRO-MEAN C-33	5785-24-37733
	BRO-MEAN C-0	5785-41-37733
	BRO-MEAN SOL	5785-13-37733
REGAL CHEMICAL CO	CONSYST	48234-3
RENTOKIL INC	RENTOKIL CCA TYPE C 60%	47097-4
	RENTOKIL CCA TYPE C 50%	47097-3

CORPORATIONS	PRODUCT NAME	NUMBERS
RESEARCH PRODUCTS	DETIA TABLETS DETIA PELLETS DETIA GA EX-B WEEVIL-CIDE TABLETS WEEVIL-CIDE PELLETS	2548-62 2548-63 2548-59 59209-1-2548 59209-2-2548
RHONE-POULENC	MOCAP 15% NEMATICIDE MOCAP 10% NEMATICIDE MOCAP PLUS 4-2 EC MOCAP PLUS MOCAP EC NEMATICIDE BUCTRIL BUCTRIL & ATRAZINE BRONATE HERBICIDE MOCAP PLUS 4-2 EC MOCAP PLUS MOCAP EC MOCAP 15G MOCAP 10% GRANULAR (TURF) CHIPCO MOCAP BRAND 5G PESTICIDE TEMIK 15G	264-457 264-497 264-464 264-459 264-458 264-437 264-477 264-438 359-702 359-697 359-696 359-695 359-739 264-471 264-330
RID-A-BIRD	RID-A-BIRD 1100	7579-2
RIVERSIDE CHEMICAL	RIVERSIDE METHYL PARATHION 7.2 RIVERSIDE DITHON 63 RIVERSIDE PARAQUAT RIVERSIDE RAIDER 33 METHYL PARATHION 4	9779-218 9779-125 239-2186-9779 9779-31 9779-34
RIVERSIDE/TERRA	PHORATE 20-G PARATHIN 4 SIMAZINE 4L PHORATE 15-G	9779-293 9779-26 2749-512-9779 2749-123-9779
ROHM & HASS	KERB 50-W TOK E-25 CONIFER (NURS SEED BEDS)	707-98 SLN GA-780027
ROHM & HASS	KERB 50-W	707-159
ROUSSEL-BIO	PRAMEX 13.3% EC	SLN GA 790020

CORPORATIONS	PRODUCT NAME	NUMBERS
SETRE CHEMICAL	PARATHION 8E PARATHION-METHYL PARATHION 6-3 7.5 LB METHYL PARATHION PARAQUAT PLUS 4 LB METHYL PARATHION PARATHION 4-E ATRAZINE 90DF PARATHION 25 WP	5905-86-38167 5905-225-38167 5905-414-38167 239-2186-38167 5905-55-38167 5905-82-38167 35915-3-38167 5905-255-38167
SHELL CHEMICAL	PYDRIN INSECTICIDE 2.4 EC	SLN GA-850003
SIGMA COATINGS	7293 PILOT LL 7284 HI-BUILD	11350-9 11350-25
SOIL CHEM CORP	TRO-TOX 57% PELLETS TRI-TOX 57% TABLETS	8536-25 8536-26
SOUTHERN AG	PARATHION 8E SPRAY CONCENTRATE METHYL BROMIDE 100%	829-166 5785-41-829
SOUTHERN MILL CREEK	LINDANE 1E CHLOROPICRIN	6720-161 6720-133
SOWECO INC	LARVACIDE 100 CHLOROPICRIN 100 SOWECO BRAND	21327-4 21327-1
STAUFFER CHEMICAL	DYFONATE 4-EC DYFONATE 4-EC	SLN GA-820016 476-2134
STEPHENSON CHEMICAL	STEPHENSON CHEMICALS 20% LINDANE EC	4887-68

CORPORATIONS	PRODUCT NAME	NUMBERS
SURECO INC	PARATHION-SULPHUR 2-PEACH SPRAY 6 PARATHION 15% WETTABLE SUREGARD PARATHION-CAPTAN PCH SPRAY SURE GARD SURE-KOTE P SECURITY PARATHION 10% SECURITY SURE-KOTE P PARATHION-CAPTAN PCH SPRAY LINDANE 20% EC	769-110 769-77 769-241 769-518 769-442 769-518 769-241 769-159
TENKOZ	METHYL PARATHION 7.5 METHYL PARATHION 4ec	10163-73-55467 10163-121-55467
TIDE PRODUCTS INC	METHYL BUDMOR 33 PARATHION-METHYL ETHYL	6735-89 6735-238 6735-118 6735-100
TRIANGLE CHEMICAL	TRIANGLE METHYL PARATHION 4 LB. EC	1842-205
TULL CHEMICAL	COMPOUND 1080	5217-1
U.S. DEPT OF AG	ZINC PHOSPHIDE PIGEON BAIT ZINC PHOSPHIDE CONC COMPOUND DRC-1339	56228-6 56228-8 56228-9 56228-10
UNION CARBIDE	TEMIK 15-G TEMIK 10G TEMIK TSX TEMIK 15G AMIZOL AMIZINE AMIZINE AMITROL LIQUID AMIZINE	264-330 264-322 264-319 SLN GA-820013 264-119 264-196 264-124 264-135 264-196-AA

CORPORATIONS	PRODUCT NAME	NUMBERS
UNIROYAL CHEMICAL	DIMILIN 2F DIMILIN 25W TERRACLOR SUPER X SOIL DI-SYSTON DIMILIN W-25 (GYPSY MOTH)	37100-27-400 37100-8-400 400-408 37100-8-400
UNIVERSAL COOP	LINDANE EC EPN-MP MP 7-2 MP 4EC	1386-45 9779-31-1386 9779-218-1386 9779-34-1386
VALENT USA CORP	MONITOR 4 SPRAY MONITOR 4 SPRAY LINDANE NO. 200 SPRAY	SLN GA. 90005 SLN GA. 860004 59639-57
VELSICOL CHEMICAL	GOLD CREST C-100	876-462
VULCAN MATERIAL	GLAZED PENTA CHLOROPHENOL	5382-16
WESLEY INDUSTRIES	TRIPLE TIN 4L	47916-35
WILBUR-ELLIS CO.	PHOSDRIN 4 SPRAY	2935-167
WOOD CHEMICALS	WOOD CHEMICALS GROUP CCA-C	3008-36-57189
WOODBURY CHEMICAL CO	"L" FUME PELLETS	30574-1
ZOECON	SAFROTIN EC INSECTICIDE	2724-314-50809

INSTALLATION:	COMPLIANCE CATEGORY: FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT Georgia Supplement	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

SECTION 10

NATIONAL HISTORIC PRESERVATION ACT

AND CULTURAL RESOURCES

Georgia Supplement

SECTION 10

NATIONAL HISTORIC PRESERVATION ACT AND CULTURAL RESOURCES

Georgia Supplement

These definitions were obtained from the *Rules of Georgia Department of Natural Resources* (RGDNR), Parks, Recreation, and Historic Sites Division, Chapters 391-5-9 and 391-5-10.

Definitions

- *Department* - the Department of Natural Resources, State of Georgia.
- *Division* - the Parks, Recreation, and Historic Sites Division of the Department of Natural Resources.
- *Exploration* - all activities involving the search for and determination of the nature of submerged cultural resources located on, or imbedded in, the bottoms of the Atlantic Ocean within the 3-mile (mi) territorial limit of the state or within navigable waters of the state.
- *Georgia Register of Historic Places or Georgia Register* - the Georgia Register of districts, sites, buildings, structures, and objects significant in Georgia history, architecture, engineering, and culture.
- *National Register of Historic Places* - the national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture, maintained by the Secretary of the Interior under authority of the *National Historic Preservation Act*.
- *Operation* - any project, activity, work, exploration, recovery, or conduct for which a permit is required.
- *Recovery* - all activities involving the collection, excavation, dislodgement, displacement, disassembly, salvage, or any other removal of submerged cultural resources or associated artifacts from their natural or cultural disposition setting or surroundings.
- *Submerged Cultural Resources* - all prehistoric and historic sites, ruins, artifacts, treasure, treasure-trove, shipwrecks or vessels and their cargo or tackle which have remained on the bottom for more than 50 year (yr), and similar sites and objects found in the Atlantic Ocean within the 3-mi territorial limit of the state or within its navigable waters. This term may include, but not be limited to, sites listed in, or eligible for listing, in the National Register of Historic Places.

NATIONAL HISTORIC PRESERVATION ACT (NHPA)

AND CULTURAL RESOURCES

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
Submerged Cultural Resources	10-1 and 10-2
Georgia Register	10-3

COMPLIANCE CATEGORY: NATIONAL HISTORIC PRESERVATION ACT & CULTURAL RESOURCES Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
SUBMERGED CULTURAL RESOURCES	
10-1. Installations must have a permit prior to conducting any exploration, survey, or recovery operation where any part of a submerged cultural resource may be endangered, removed, displaced, or destroyed (RGDNR, Chapter 391-5-9 -.04).	Determine if the installation is conducting any exploration, survey, or recovery operation where any part of a submerged cultural resource may be endangered, removed, displaced, or destroyed. Verify that the installation has obtained a permit and operates within the conditions of the permit.
10-2. All findings of submerged or suspended cultural resources must be reported to the division (RGDNR, Chapter 391-5-9-.03).	Verify that all findings or sightings of submerged or suspended cultural resources are reported to the division within 2 days of such finding.
GEORGIA REGISTER	
10-3. Historic property can be included in the Georgia Register and must meet specific regulations (RGDNR, Chapter 391-5-10-.02).	Determine if the installation has any property listed in the Georgia Register. Verify that all regulations concerning the listing of a property in the Georgia Register are met, including those concerning the following categories: - boundary alterations - movement of properties - removal of properties from the Georgia Register. (NOTE: All properties currently listed in the National Register will be listed in the Georgia Register, as will any subsequent listings. However, listing in the Georgia Register does not mean listing in the National Register.)

INSTALLATION:	COMPLIANCE CATEGORY: NATIONAL HISTORIC PRESERVATION ACT AND CULTURAL RESOURCES Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 11

NATURAL RESOURCES MANAGEMENT

Georgia Supplement

SECTION 11

NATURAL RESOURCES MANAGEMENT

Georgia Supplement

Definitions

These definitions were obtained from the *Rules of Georgia Department of Natural Resources* (RGDNR), Game and Fish Division, Chapter 391-4-10: Protection of Endangered, Threatened, Rare, or Unusual Species, Section 391-4-10-.02.

- *Department* - the Department of Natural Resources.

- *Protected Species* - those species of plants and animal life which the Department shall have designated as such and has made subject to the protection of the Acts. Protected species shall be interpreted to include those classified as follows:
  1. endangered species: any resident species which is in danger of extinction throughout all or a significant portion of its range, or one which is designated as endangered under the provisions of the Federal *Endangered Species Act of 1973*
  2. threatened species: any resident species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range or one that is designated as endangered under the provisions of the Federal *Endangered Species Act of 1973*
  3. rare species: any resident species which, although not presently endangered or threatened, should be protected because of its scarcity
  4. *unusual species:* any resident species which exhibits special or unique features and because of these features deserves special consideration in its continued survival in the state.

- *Public Lands* - all those lands within this state which are owned or subject to the dominion and the control of the United States, the State of Georgia, or local governments within the State of Georgia.

- *Resident Species* - any species, sub-species or variety of plant or animal life that is genetically, morphologically, ecologically, or geographically distinct, and which interbreeds freely with its kind at maturity, and which exists in this state, including its waters, in the wild during any part of its life.

- *Status Undetermined Species* - a resident species which is not afforded protection under these rules and regulations, but should additional research show the need for protection these or any other species may be moved to the protected category.

NATURAL RESOURCES MANAGEMENT

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
Protection of Plant and Animal Species	11-1 through 11-3

COMPLIANCE CATEGORY: NATURAL RESOURCES MANAGEMENT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
PROTECTION OF PLANT AND ANIMAL SPECIES	
11-1. A Departmental permit is required for the collection, transportation, and/or possession of protected plant and animal species (RGDNR, Chapter 391-4-10, Section 391-4-10-.07).	(NOTE: Determine if the installation has conducted surveys to locate state-protected species on its property and has a recent listing of state-protected species.) Determine if any plant or animal which is a protected species is collected, transported and/or possessed by installation personnel (see Appendix 11-1 for animals and Appendix 11-2 for plants). Verify that a permit has been obtained for the collection, transportation, or possession of a protected plant or animal species. (NOTE: Such permits do not alleviate the responsibility to acquire specific Federal permits if necessary.)
11-2. Protected animal species and their habitat must be protected (RGDNR, Chapter 391-4-10-.06 (a)).	Verify that there is no harassment, capture, sale, killing, or other action which directly causes the death of any protected animal. Verify that there is no destruction of the habitat of a protected species on public land.
11-3. Protected plant species and their habitat must be protected (RGDNR, Chapter 391-4-10-.06 (b)).	Verify that no protected plant species is cut, dug, pulled up, or otherwise removed from public land, unless an appropriate permit has been obtained.

Appendix 11 - 1

Endangered, Threatened, or Unusual Species Found in Georgia

(Source: RGDNR, Chapter 391-4-10, Section 391-4-10-.09)

Scientific Name	Common Name	Status*
	MAMMALS	
Eubalaena glacialis	Northern Right Whale	E
Felis concolor coryi	Florida Panther	E
Felis concolor cougar	Eastern Cougar	E
Megaptera novaeangliae	Humpback Whale	E
Myotis sodalis	Indiana Bat	E
Myotis grisescens	Gray Bat	E
Plecotus rafinesquii	Rafinesque's Big-eared Bat	R
Sylvilagus transitionalis	New England Cottontail	R
Trichechus manatus	West Indian Manatee	E
	BIRDS	
Aimophia aestivalis	Bachman's Sparrow	R
Charadrius melodus	Piping Plover	T
Charadrius wilsonia	Wilson's Plover	R
Corvus corax	Common Raven	R
Dendroica kirtlandii	Kirtland's Warbler	E
Elanoides forficatus	Swallow-tailed Kite	R
Falco peregrinus	Peregrine Falcon	E
Haematopus palliatus	American Oystercatcher	R
Haliaeetus leucocephalus	Bald Eagle	E
Mycteria americana	Wood Stork	E
Picoides borealis	Red-cockaded Woodpecker	E
Sterna antillarum	Least Tern	R
Sterna nilotica	Gull-billed Tern	T
Thryomanes bewickii	Bewick's Wren	R
Vermivora bachmanii	Bachman's Warbler	E
	REPTILES	
Caretta caretta	Loggerhead Sea Turtle	T
Chelonia mydas	Green Sea Turtle	T
Clemmmys guttata	Spotted Turtle	U
Clemmys muhlenbergii	Bog Turtle	T
Dermochelys coriacea	Leatherback Sea Turtle	E
Drymarchon corais couperi	Eastern Indigo Snake	T
Eretmochelys imbricata	Hawksbill Sea Turtle	E

Scientific Name	Common Name	Status*
REPTILES (continued)		
Gopherus polyphemus	Gopher Tortoise	T
Graptemys barbouri	Barbour's Map Turtle	T
Graptemys pulchra	Alabama Map Turtle	R
Lepidochelys kempii	Kemp's Ridley Sea Turtle	E
Macroclemys temmincki	Alligator Snapping Turtle	T
AMPHIBIANS		
Ambystoma cingulatum	Flatwoods Salamander	R
Amphiuma pholeter	One-toed Amphiuma	R
Aneides aeneus	Green Salamander	R
Crytobranchus alleganiensis	Hellbender	R
Haideotriton wallacei	Georgia's Blind Salamander	T
Notophthalmus perstriatus	Striped Newt	R
Plethodon petraeus	Pigeon Mountain Salamander	R
FISHES		
Acipenser brevirostrum	Shortnose Sturgeon	E
Alosa alabamae	Alabama Shad	U
Ameiurus serracanthus	Spotted Bullhead	R
Cyprinella caerulea	Blue Shiner	E
Cyprinella callitaenia	Bluestripe Shiner	T
Cyprinella gibbsi	Tallapoosa Shiner	R
Cyprinella xaenura	Altamaha Shiner	E
Ennaecanthus chaetodon	Blackbanded Sunfish	R
Erimystax insignis	Blotched Chub	T
Etheostoma brevirostrum	Holiday Darter	T
Etheostoma chlorobranchium	Greenfin Darter	T
Etheostoma ditrema	Coldwater Darter	T
Etheostoma duryi	Black Darter	T
Etheostoma parvipinne	Goldstripe Darter	R
Etheostoma tallapoosae	Tallapoosa Darter	R
Etheostoma trisella	Trispot Darter	T
Etheostoma vulneratum	Wounded Darter	E
Etheostoma sp. cf *coosae*	Cherokee Darter	T
Etheostoma sp. cf *jordani*	Etowah Darter	T
Etheostoma sp. cf *jordani*	Lipstick Darter	E
Fundulus auroguttatus	Undescribed Topminnow	R
Fundulus bifax	Stippled Studfish	E
Fundulus catenatus	Northern Studfish	T
Hemitremia flammea	Flame Chub	E
Hybopsis amblops	Bigeye Chub	R
Ichthyomyzon bdellium	Ohio Lamprey	R
Lucania goodei	Bluefin Killifish	U
Lythrurus bellus	Pretty Shiner	T
Micropterus notius	Suwannee Bass	R

Scientific Name	Common Name	Status*
FISHES (continued)		
Moxostoma carinatum	River Redhorse	R
Moxostoma sp. cf *carinatum*	Atlantic River Redhorse	E
Notropis ariommus	Popeye Shiner	T
Notropis harperi	Redeye Chub	R
Notropis hypsilepis	Highscale Shiner	T
Notropis photogenis	Silver Shiner	E
Notropis scepticus	Sandbar Shiner	R
Noturus eleutherus	Mountain Madtom	T
Noturus funebris	Black Madtom	R
Noturus munitus	Frecklebelly Madtom	E
Noturus nocturnus	Freckled Madtom	E
Percina antesella	Amber Darter	E
Percina aurantiaca	Tangerine Darter	E
Percina aurolineata	Goldline Darter	T
Percina jenkinsi	Conasauga Logperch	E
Percina lenticula	Freckled Darter	E
Percina sciera	Dusky Darter	R
Percina shumardi	River Darter	E
Percina squamata	Olive Darter	T
Percina tanasi	Snail Darter	E
Percina sp. cf *macrocephala*	Muscadine Darter	R
Phenacobius crassilabrum	Fatlips Minnow	E
Phenacobius uranops	Stargazing Minnow	T
Pteronotropis euryzonus	Broadstripe Shiner	R
Pteronotropis welaka	Bluenose Shiner	R
Typhlichthys subterraneus	Southern Cavefish	R
INVERTEBRATES		
Epioblasma metastriata	Upland Combshell	E
Epioblasma othcaloogensis	Southern Acornshell	E
Fusconaia masoni	Atlantic Pigtoe Mussel	E
Lamsilis altilis	Fine-lined Pocketbook	T
Medionidus acutissimus	Alabama Moccasinshell	T
Pluerobema decisum	Southern Clubshell	E
Pluerobema georgianum	Southern Pigtoe	E
Pluerobema perovatum	Ovate Clubshell	E
Ptychobranchus greeni	Triangula Kidneyshell	E

*Key:
E = endangered species
T = threatened species
R = rare species
U = unusual species

Appendix 11 - 2

Endangered, Threatened, and Unusual Plants Found in Georgia

(Source: RGDNR, Chapter 391-4-10, Section 391-4-10-.09)

Scientific name	Common name	Status*
Allium specula	Flatrock Onion	T
Amphianthus pusillu	Pool Sprite	E
Arabis georgian	Georgia rockcress	T
Asplenium heteroresilien	Spleenwort	T
Baduina atropurpure	Purple Honeycomb Head	R
Baptisia arachnifer	Hairy rattleweed	E
Bumelia thorne	Swamp Buckthorn	E
Cacalia diversifoli	Indian plantain	T
Calamintha ashe	Ohoopee Wild Basil	T
Carex biltmorean	Biltmore sedge	T
Carex dasycarp	Velvet Sedge	R
Carex manharti	Manhart Sedge	T
Carex miser	Sedge	T
Carex pupurifer	Purple sedge	T
Ceratiola ericoide	Rosemary	T
Chamaecyparis thyoide	Atlantic White-Cedar	R
Chrysopsis pinifoli	Sandhill Goldenaster	T
Croomia pauciflor	Croomia	T
Cuscuta harper	Harper Dodder	T
Cymophyllus fraser	Fraser Sedge	T
Cypripedium acaul	Pink Ladyslipper	U
Cypripedium calceolu	Yellow ladyslipper	U
Draba apric	Draba	E
Echinacea laevigat	Smooth Purple Coneflower	T
Elliottia racemos	Georgia plume	T
Epidendrum conopseu	Greenfly Orchid	U
Evolvulus sericeu	Silky Morning-glory	E
Fimbristylis perpusill	Harper fimbristylis	E
Fothergilla gardeni	Dwarf witch-alder	T
Gentianopsis crinit	Fringed Gentian	T
Hartwrightia floridan	Hartwrightia	T
Helonias bullat	Swamp pink	T
Hexastylis shuttleworthii var. *harperi*	Harper Wild Ginger	U
Hydrastis canadensis	Goldenseal	E
Hymenocallis coronaria	Shoals spiderlily	E
Isoetes melanospora	Black-spored quillwort	E
Isoetes tegetiformans	Mat-forming quillwort	E
Isotria medeoloides	Small whorled pogonia	E
Jeffersonia diphylla	Twinleaf	E
Leavenworthia exigua	Gladecress	T
Lindera melissifolia	Pond Spicebush	E
Lindernia saxicola	False pimpernel	E

Scientific name	Common name	Status*
Litsea aestivalis	Pond Spice	T
Lysimachia fraseri	Fraser Loosestrife	R
Lythrum curtissii	Curtiss loosestrife	T
Marshallia mohrii	Mohr Barbara Buttons	T
Marshallia ramosa	Pineland Barbara Buttons	R
Matelea alabamensis	Alabama Milkvine	T
Matelea pubiflora	Trailing Milkvine	R
Myriophyllum laxum	Water-milfoil	T
Nestronia umbellula	Indian Olive	T
Oxypolis canbyi	Canby Dropwort	T
Panicum hirstii	Panic Grass	E
Penstemon dissectus	Cutleaf Beardtongue	R
Physostegia leptophylla	Narrowleaf Obedient Plant	T
Pinguicula primuliflora	Clearwater Butterwort	T
Plantanthera integrilabia	Monkeyface Orchid	T
Potentilla tridentata	Three-toothed Cinquefoil	E
Ptilimnium nodosum	Harperella	E
Quercus oglethorpensis	Oglethorpe Oak	T
Rhododendron prunifolium	Plumleaf Azalea	T
Rhus michauxii	Dwarf Sumac	E
Sabatia capitata	Cumberland Rose Gentian	R
Sageretia minutiflora	Climbing Buckthorn	T
Sagittaria secundifolia	Kral Water-plantain	T
Salix floridana	Florida Willow	E
Sarracenia flava	Yellow Flytrap	U
Sarracenia leucophylla	Whitetop Pitcherplant	E
Sarracenia minor	Hooded Pitcherplant	U
Sarracenia oreophila	Green Pitcherplant	E
Sarracenia psittacina	Parrot Pitcherplant	T
Sarracenia purpurea	Northern Pitcherplant	E
Sarracenia rubra	Sweet Pitcherplant	E
Schisandra glabra	Bay Star-vine	T
Schwalbea americana	Chaffseed	T
Scutellaria montana	Large-flower Skullcap	T
Scutellaria ocmulgee	Ocmulgee Skullcap	T
Sedum nevii	Nevius Stonecrop	T
Sedum pusillum	Granite Stonecrop	T
Senecio millefolium	Blue Ridge Golden Ragwort	T
Shortia galacifolia	Oconee Bells	E
Silene polypetala	Fringed Campion	E
Silene regia	Royal Catchfly	R
Spiraea virginiana	Virginia Spirea	T
Spiranthes magnicamporum	Great Plains Ladies-tresses	E
Stewartia malacodendron	Silky Camelia	R
Stylisma pickeringii var. *pickeringii*	Pickering Morning-glory	T
Thalictrum cooleyi	Cooley Meadowrue	E
Thalictrum debile	Trailing Meadowrue	T
Tillandsia recurvata	Ball-Moss	T
Torreya taxifolia	Florida Torreya	E
Trientalis borealis	Starflower	E

Scientific name	Common name	Status*
Trillium persistens	Persistent Trillium	E
Trillium reliquum	Relict Trillium	T
Veratrum woodii	Ozark Bunchflower	R
Viburnum bracteatum	Limerock Arrow-wood	E
Waldsteinia lobata	Barren Strawberry	T
Xerophyllum asphodeloides	Eastern Turkeybeard	R
Xyris tennesseensis	Tennessee Yellow-Eye Grass	E

*Key
E = Endangered
T = Threatened
R = Rare
U = Unusual

INSTALLATION:	COMPLIANCE CATEGORY: NATURAL RESOURCES MANAGEMENT Georgia Supplement	DATE:	REVIEWER(S):
STATUS NA C RMA	REVIEWER COMMENTS:		

SECTION 12

NATIONAL ENVIRONMENTAL POLICY ACT

Georgia Supplement

SECTION 12

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Georgia Supplement

Regulations promulgated under the authority of NEPA are applicable to installations in Georgia. Refer to Protocol 12 in the U.S. ECAS Manual for Federal, Army, and DOD requirements.

INSTALLATION:	COMPLIANCE CATEGORY: NATIONAL ENVIRONMENTAL POLICY ACT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 13

ASBESTOS MANAGEMENT PROGRAM

Georgia Supplement

SECTION 13

ASBESTOS MANAGEMENT PROGRAM

Georgia Supplement

This protocol contains additional state requirements for the management of asbestos waste. These requirements are in addition to those found in 40 Code of Federal Regulations (CFR) 61.

Definitions

These definitions were obtained from the *Rules of Georgia Department of Natural Resources* (RGDNR), Chapter 391-3-4 and Chapter 391-3-14.

- *Asbestos-Containing Waste* - any solid waste containing more than 1 percent by weight, of naturally occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of serpentine, chrysatile, cummingtomite-grunerite, amosite, riecheckite, crocidolite, anthophyllite, tremolite, and actinolite.

- *Demolition* - the wrecking or taking out of any load supporting structural member of a facility together with related handling operations.

- *Division* - the Environmental Protection Division of the Department of Natural Resources of the State of Georgia.

- *Emergency Project* - the removal or encapsulation of friable asbestos-containing material from any facility where such activity must be conducted immediately in order to prevent disruption of a commercial or industrial process or activity or destruction of property.

- *Encapsulation* - to coat, bind, or resurface walls, ceilings, pipes, or other structures with a sealant to prevent friable asbestos from becoming airborne.

- *Facility* - any institutional, commercial, or industrial structure, installation, or building, including apartment buildings having more than four dwelling units.

- *Friable Asbestos-Containing Material* - any material which is applied onto ceilings, walls, structural members, piping, boilers, tanks, pumps, ductwork, or any other part of the building containing more than one percent asbestos, by weight, and which when dry may be crumbled, pulverized, or reduced to powder by hand pressure.

- *Outside Air* - the air outside buildings and structures.

- *Removal* - to take out, strip, cleanup, or dispose of friable or potentially friable asbestos-containing materials from any facility or residential dwellings.

- *Residential Dwelling* - any family residence or apartment building with four or fewer dwelling units.

- *Visible Emissions* - any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed, uncombined water vapor.

ASBESTOS MANAGEMENT PROGRAM

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
Asbestos Removal	13-1 through 13-7
Disposal of Asbestos Containing Waste	13-8 and 13-9

COMPLIANCE CATEGORY: ASBESTOS MANAGEMENT PROGRAM Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
ASBESTOS REMOVAL	
13-1. Notification of asbestos removal activities is required (RGDNR, Chapter 391-3-14 -.02(2)).	Verify that notice of removal activities is made to the Director at least seven calendar days prior to commencement of the project. Verify that notice of emergency activities is made to the Director within seven calendar days after commencement of the emergency project. Verify that upon completion of the project the contractor certifies the completion of the project to the Director. (NOTE: Contractors doing asbestos removal must be licensed and certified by the state.)
13-2. Facilities and dwellings being demolished because they are structurally unsound must meet specific asbestos management requirements (RGDNR, Chapter 391-3-14-.02(1)(a)1(vii)).	Verify that when facilities and dwellings are being demolished the portions containing friable asbestos containing material are adequately wet during the wrecking operation.
13-3. Procedures for removal of asbestos containing materials from a facility or dwelling must meet specific requirements (RGDNR, Chapter 391-3-14-.02(1) (a)1(i) through (iii)).	Verify that friable asbestos materials are removed from a facility or residential dwelling before any wrecking or dismantling that would break up the materials or preclude access to the materials for subsequent removal, unless the following conditions are met: - the friable asbestos is on a component that is encased in concrete or other similar material - the materials are adequately wetted whenever exposed during demolition. Verify that when components covered or coated with friable asbestos materials are taken out as units or in sections the following conditions are met: - friable asbestos materials exposed during cutting or disjointing operations are adequately wet - units or sections are carefully lowered (not thrown or dropped) to ground level. Verify that friable asbestos material is adequately wet when it is being stripped from components before removal from a facility or dwelling. (NOTE: The Director may determine that an exhaust ventilation and collection system may be used if wetting will damage removal equipment.)

COMPLIANCE CATEGORY: ASBESTOS MANAGEMENT PROGRAM Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
13-4. Mangement of friable asbestos containing materials and components after removal from a facility or dwelling must meet specific requirements (RGDNR, Chapter 391-3-14 -.02(1)(a)1(iv)).	Verify that after components have been removed from a facility or dwelling one of the following requirements is met: - the friable asbestos containing materials are adequately wet during stripping - a local exhaust ventilation and collection system captures the particulate asbestos containing materials without exhibiting visible emissions to the outside air. Verify that the management of friable asbestos containing materials that have been removed or stripped meets the following requirements: - adequately wet to insure that they remain wet until they are collected for disposal - carefully lowered to the ground or a lower floor without dropping or throwing - materials transported to the ground via dust-tight chutes or containers if they have been removed or stripped more than 50 feet (ft) above ground level and were not removed as units or in sections.
13-5. When the temperature at the point of wetting is below 0 ℃ (32 ℉), specific requirements must be met for the management of friable asbestos containing materials (RGDNR, Chapter 391-3-14-.02(1)(a)1(vi)).	Determine if friable asbestos containing materials are removed or stripped when the temperature at the point of wetting is below 0 ℃ (32 ℉). Verify that components coated or covered with friable asbestos-containing materials are removed as units or in sections to the maximum extent possible. Verify that a local exhaust ventilation and collection system that exhibits no visible emissions to the outside air is used to capture asbestos containing materials. Verify that materials are carefully lowered to the ground or lower floors. Verify that if the materials are stripped more than 50 ft above ground level and not removed as units or in sections, the materials are transported to the ground via dust-tight chutes or containers.
13-6. The handling of asbestos containing waste material from removal or demolition operations must meet specific requirements (RGDNR, Chapter 391-3-14 -.02(1)(b)).	Verify that all asbestos containing waste material meets the following disposal standards: - deposited at a disposal site approved by the Division for disposal of asbestos containing material - discharges no visible emissions to the outside air during the collection, processing, packaging, transporting or disposition of the material.

COMPLIANCE CATEGORY: ASBESTOS MANAGEMENT PROGRAM Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**

13-6. (continued)	Verify that if the asbestos containing material from control devices is treated with water to form a slurry, the following requirements are met:
	
	- seal all asbestos containing waste material in leak-tight containers while wet
	- label containers as follows:
	
	CAUTION!
	CONTAINS ASBESTOS - AVOID OPENING OR BREAKING CONTAINER.
	BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH.
	
	- adequately wet other asbestos containing waste material
	- meet one of the following air emission standards
	  - no visible emissions are discharged to the outside air from collection, mixing and wetting operations
	  - the requirements specified for air cleaning are met to ensure clean emissions.
	
	(NOTE: An alternative disposal method that has received prior approval from the Director may be used.)

13-7. When air cleaning is used to prevent emissions to the outside air, specific standards must be met for the filtering equipment (RGDNR, Chapter 391-3-14 -.02(1)(c)).	Verify that fabric filter collection devices meet the following requirements: - operated at a pressure drop of no more than 4 in. water gauge, as measured across the fabric filter - ensure that the air flow permeability does not exceed 30 $ft^3/min/ft^2$ for woven fabrics or 35 $ft^3/min/ft^2$ for felted fabrics - ensure that felted fabric weighs at least 14 ounces per square yard and is at least 1/16 inch (in.) thick throughout - avoid the use of synthetic fabrics that contain fill yarn other than that which is spun. Verify that bypass devices are only used during upset or emergency conditions and only as long as necessary. (NOTE: The Director may authorize the use of wet collectors or other filtering equipment.)
DISPOSAL OF ASBESTOS CONTAINING WASTE	
13-8. Installations that are involved in the collection and transportation of asbestos-containing waste must meet specific requirements (RGDNR, Chapter 391-3-4 -.04(8)(a).	Determine if the installation collects or transports asbestos-containing waste. Verify that the installation does not use vehicles that reduce waste volume by compaction to transport asbestos-containing waste. Verify that vacuum trucks used to transport waste slurry do not leak.

COMPLIANCE CATEGORY: ASBESTOS MANAGEMENT PROGRAM Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
13-8. (continued)	Verify that the installation transports containerized asbestos waste either inside the enclosed carrying compartment of a vehicle so equipped, or covered well enough to contain the waste, prevent container damage, and prevent release/spillage.
13-9. Installations that are involved in the disposal of asbestos-containing waste must meet specific requirements (RGDNR, Chapter 391-3-4-.04 (8)(b)).	Determine if the installation generates or disposes of asbestos-containing waste. Verify that asbestos-containing waste is sealed in leak-proof containers labeled as follows: CAUTION! CONTAINS ASBESTOS FIBERS - AVOID OPENING OR BREAKING CONTAINER. BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH. Verify that the integrity of the containers is not destroyed prior to their being covered over in a landfill. Verify that the containers are covered over immediately after placement in the landfill with a layer of nonasbestos material at least 6 in. deep. Verify that asbestos-containing waste is disposed of only in a facility whose permit authorizes it to accept asbestos-containing waste.

INSTALLATION:	COMPLIANCE CATEGORY: ASBESTOS MANAGEMENT PROGRAM Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 14

NOISE ABATEMENT

Georgia Supplement

SECTION 14

NOISE ABATEMENT

Georgia Supplement

According to the Georgia Department of Transportation there are no state-wide regulations concerning airport and airplane noise control, and motor vehicle noise. Refer to the U.S. ECAS Manual for Federal, Army, and DOD requirements.

INSTALLATION:	COMPLIANCE CATEGORY: NOISE ABATEMENT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 15

RADON PROGRAM

Georgia Supplement

SECTION 15

RADON PROGRAM

Georgia Supplement

The state has no regulations concerning the testing of indoor radon levels. See the U.S. ECAS Manual for DOD and Army requirements.

INSTALLATION:	COMPLIANCE CATEGORY: RADON PROGRAM Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 16

ENVIRONMENTAL PROGRAM MANAGEMENT

Georgia Supplement

SECTION 16

ENVIRONMENTAL PROGRAM MANAGEMENT

Georgia Supplement

This protocol has no specific, applicable state regulations. Refer to the U.S. ECAS Manual for Army requirements.

INSTALLATION:	COMPLIANCE CATEGORY: ENVIRONMENTAL PROGRAM MANAGEMENT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS:

SECTION 17

HAZARDOUS MATERIALS MANAGEMENT

Georgia Supplement

SECTION 17

HAZARDOUS MATERIALS MANAGEMENT

Georgia Supplement

The manufacture, purchase, sale, conveyance, transport, storage or possession of explosives or blasting agents under the jurisdiction of the Federal Department of Transportation; Interstate Commerce Commission, the Georgia Public Service Commission; the United States Coast Guard; the regular military; the Air Forces; the Navy; the duly authorized militia of the State; State law enforcement officials; or any Federal agencies are exempt from obtaining a permit or license (*Rules of Safety Fire Commissioner*, Chapter 120-3-10).

The following National Fire Protection Association Codes and Standards have been adopted except to the extent modified:

- Flammable and Combustible Liquids Code (NFPA Number 30, 1990), with modification
- Automotive and Marine Service Station Code (NFPA Number 30A, 1990), with modification
- Manufacture and Storage of Aerosol Products (NFPA Number 30B, 1990)
- Standards for the Installation of Oil Burning Equipment (NFPA Number 31, 1990)
- Standards for Drycleaning Plants (NFPA Number 32, 1990)
- Standards for Spray Application Using Flammable and Combustible Materials (NFPA Number 33)
- Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines (NFPA Number 37, 1990)
- National Electrical Code (NFPA Number 70, 1990)
- Standard for Parking Structures (NFPA Number 88A, 1991)
- Standard of Repair Garages (NFPA Number 88B, 1991)
- Standard on Basic Classification of Flammable and Combustible Liquids (NFPA Number 321, 1991).
- Standards Procedures for Cleaning or Safeguarding Small Tanks and Containers (NFPA Number 327, 1987)
- Standards for Tank Vehicles for Flammable and Combustible Liquids (NFPA Number 385, 1990), with modification
- Standards for Portable Shipping Tanks (NFPA Number 386, 1990)
- Standards for Tank Vehicles for Flammable and Combustible Liquids on Farms and Isolated Construction Projects (NFPA Number 395, 1988)
- Aircraft Fuel Servicing (NFPA Number 407, 1990)

Definitions

The following definitions were obtained from the *Rules of the Georgia Public Service Commission*, Section 1-15-1-.01 and *Rules of the Safety Fire Commissioner* (RSFC), Sections 120-3-10-.03, 120-3-11-.02, 120-3-11-.07, 120-3-12-.03, 120-3-12-.04, 120-3-16-.02, and 120-3-16-.07(2)(g).

- *49 CFR* - Title 49 of the Unites States Code of Federal Regulations.

- *Act* - the *Transportation of Hazardous Materials Act*, Act 394, Georgia Laws of 1985.

- *Bulk Storage* - the portion of a property where flammable and combustible liquids are received by tank vessel, pipeline, tank car, or tank vehicle, and are stored or blended in bulk.

- *Carrier* - any person engaged in the transportation of liquefied natural gas (LNG), polychlorinated biphenyls (PCBs), and radioactive materials.

- *Commission* - Georgia Public Service Commission.

- *Commissioner* - the Georgia Safety Fire Commissioner.

- *DOT* - the United States Department of Transportation.

- *Dealer in Liquefied Petroleum Gas* - any person who sells or offers to sell liquefied petroleum gas to an ultimate consumer for agricultural, industrial, commercial or domestic use.

- *Exclusive Use of Vehicle* - a vehicle designed or used exclusively for transporting hazardous materials, or any vehicle which, due to requirements based on the nature of a particular commodity being transported, is restricted to transporting only that commodity in the shipment.

- *Firm Foundation* - foundation material that meets the following requirements: has a level top surface, is on solid earth, will not settle or careen, will not deteriorate, and is of masonry or other sturdy noncombustible material which will not decay or rust.

- *GPSC* - the Georgia Public Service Commission.

- *Hazardous Materials* - all radioactive materials, LNG, and PCBs.

- *ICC* - the Interstate Commerce Commission.

- *NFPA* - the National Fire Protection Association.

- *Public Hall* - any building regularly used for public assembly for purposes of amusement, instruction, religious worship or other meetings.

- *Serious Accident* - an accident in which loss of life, hospitalization of persons, or loss or damage to property involving $100.00 or more results from the accident.

- *Shipper* - any person who arranges for, provides for, solicits a carrier for, consigns to a carrier for, or contracts with a carrier for shipment or transport of goods or property.

HAZARDOUS MATERIALS MANAGEMENT

GUIDANCE FOR GEORGIA CHECKLIST USERS

Applicability	Refer to Checklist Items:
Fire and Accident Reporting	17-1
Flammable and Combustible Liquids	17-2 through 17-4
Service Stations	17-5 through 17-10
Diesel Aboveground Storage Tanks	17-11 through 17-15
Transportation of Flammable and Combustible Liquids	17-16 through 17-18
Liquefied Petroleum Gases	17-19 through 17-24
Liquefied Natural Gas and Compressed Natural Gas	17-25

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
FIRE AND ACCIDENT REPORTING	
17-1. Installations that have a fire or accident must meet reporting standards (RSFC, Chapter 120-3-22, Section 120-3-22-.06).	Verify that installations notify the State Fire Marshal within 72 hours (h) of fires involving regulated vehicles, equipment or facilities and all accidents that may create a hazard to the public from fire, explosion or related risk.
FLAMMABLE AND COMBUSTIBLE LIQUIDS	(NOTE: The state has adopted National Fire Protection Association (NFPA) Codes and Standards for the handling and storage of flammable and combustible liquids with the exception of the following modifications.)
17-2. Installations that propose to install new flammable or combustible liquids storage tanks or modify existing tanks must meet approval standards (RSFC, Chapter 120-3-11, Section 120-3-11-.03(1) and (3)).	Verify that the installation has obtained approval from the local authority or the State Fire Marshal prior to starting construction of nonportable storage tanks or add to or relocate tanks at existing facilities with the following capacities: - more than a 60 gal capacity for Class I liquids - a 120 gal capacity for Class II and Class III liquids. Verify that the installation has obtained approval from the local authority or the State Fire Marshal prior to starting construction. Verify that a copy of approved plans are kept at the installation site during construction.
17-3. Installations that store flammable and combustible liquids must meet the following safety standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(1)).	(NOTE: RSFC, Chapter 120-3-11, Section 120-3-11-.07 contains modifications, additions, and deletions to NFPA Number 30, 1990, Flammable and Combustible Liquids Code.) Verify that aboveground storage tanks for Class I flammable liquids are not erected within 300 feet (ft) of any school, church, hospital, theater or public hall. Verify that barrels, drums of combustible materials are not stored beneath or within 10 ft of any aboveground storage tank. Verify that underground storage tanks that are filled by gravity from aboveground storage tanks are equipped with either of the following: - a device that eliminates the possibility of overflow - a qualified person in constant attendance that has the means to stop the flow to the underground tanks promptly. Verify that defective or leaky tanks, containers and piping are immediately made tight or replaced.

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-3. (continued)	Verify that a suitable fence or other enclosure surrounds all aboveground tanks at bulk plants to prevent access from the public. Verify that there are no open lights and fires allowed and signs are posted to indicate this. Verify that Class I liquids are not used as a solvent or cleaning fluid except in conjunction with equipment and processes specifically designed and approved for the use. Verify that hoses are inspected at regular intervals and are replaced when signs of deterioration, weathering, or wearing are observed.
17-4. Installations that have a fire or accident must meet reporting standards (RSFC, Chapter 120-3-11, Section 120-3-11-.05).	Verify that the installation notifies the State Fire Marshal as soon as possible or within 72 h of fires involving regulated vehicles, equipment or facilities and all accidents that may create a hazard to the public from fire, explosion or related risk.
SERVICE STATIONS	
17-5. Installations must meet leaking or condemned storage tank standards for tanks which store flammable or combustible liquids (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(j)).	Verify that flammable or combustible liquids are not introduced into any leaking, condemned, or unapproved storage tank or container. Verify that flammable or combustible liquids are immediately removed from any leaking or condemned storage tank. Verify that condemned or red tagged systems are not restored to service without proper corrective actions and the approval of the appropriate authority. Verify that systems that are changed from gasoline to diesel or home heating fuel, etc., are purged to avoid cross contamination and the appropriate authority is notified.
17-6. Installations with self-service stations must meet specific permit conditions (RSFC, Chapter 120-3-11, Section 120-3-11-.04(1), (2)(c), and (4)).	Verify that installations with self-service stations have a valid self-service permit issued by the State Fire Marshal. Verify that plan approval is obtained prior to the construction of a self-service operation. Verify that installations with a self-service permit conspicuously post the permit on the premises.

COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Georgia Supplement	
REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-7. Installations with a self-service operation that dispenses Class I motor fuels must meet specific safety standards in addition to NFPA 30A, Chapter 8, 1984 standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07 (2)(a) through (f)).	(NOTE: RSFC, Chapter 120-3-11, Section 120-3-11-.07 contains modifications, additions, and deletions to NFPA Number 30, 1990, Flammable and Combustible Liquids Code.) Determine if the installation has a self-service operation that dispenses Class I motor fuels. Verify that service stations are kept clean, neat and free from rubbish and trash. Verify that combustible materials other than required stock and supplies are not accumulated in storerooms or other areas in or on the premises. Verify that a qualified attendant, at least 18 yr of age meets the following criteria: - experienced with and physically able to carefully and capably perform the required duties - not addicted to the use or under the influence of intoxicants, narcotics, or controlled substances, other than prescription drugs - familiar with all applicable state laws and regulations. Verify that while Class I liquids are being dispensed, the attendant is not assigned or performs other duties that might distract or prevent the attendant from properly supervising the dispensing. Verify that only those dispensers that are designed, or modified by approved means and approved for self-service dispensing are used for the operations. Verify that dispensers are not left in a condition that would permit delivery of Class I liquids without the knowledge of the attendant. Verify that the attendant takes positive action immediately prior to each separate use of the dispenser by a customer. Verify that appropriate signs indicating self-service operations are clearly posted and that self-service and full-service areas are clearly identified.
17-8. Installations with key or card controlled self-service operations must meet specific standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(g)).	Determine if the installation has a key or card controlled self-service operation. Verify that the installation meets the following criteria in lieu of a qualified attendant when the service station is not open to the public: - all dispensers are key or card controlled - all key or card holders are fully trained in the safety operations and meet the requirements of a qualified attendant - a fire extinguisher is located within 100 ft of the dispenser

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-8. (continued)	- each location has an approved manual fire alarm system such as a pull station, a 911 system, or a similar emergency alarm system within 100 ft of the dispenser(s) that will signal the local fire department - each location has a public telephone within 100 ft of the dispenser(s) - each location has emergency phone numbers and contact points that are clearly visible to the user - each facility has a valid self-service permit posted.
17-9. Installations that dispense Class I liquids must meet specific operator dispensing standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(h) and (i)).	Verify that installations that are not permitted for self-service operations, do not allow any person other than authorized operators and employees to use or operate any motor fuel dispensing equipment or other Class I liquids dispensing equipment at any service station open or accessible to the public. Verify that all motor fuel or Class I liquids dispensing equipment operators meet the following standards: - are physically and mentally capable and qualified to operate the dispensing equipment - are not under the influence of intoxicants, narcotics or other dangerous drugs while operating the equipment. Verify that installations with service stations open or accessible to the public additionally do not permit persons under the age of 16 to dispense motor fuel or Class I liquids. Verify that an appropriate warning sign is conspicuously posted in the dispensing area that incorporates the following or equivalent warning: "WARNING - It is unlawful for any person under the age of 16 to dispense flammable liquids or operate dispensing equipment. All dispensing shall be supervised by a qualified attendant who shall be at least 18 yr old."
17-10. Installations with aboveground storage tanks at service stations must meet specific standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(k) and (l)).	Verify that service stations open to the public do not use portable aboveground skid tanks with more than a 60 gal capacity for Class I liquids or a 120 gal capacity for Class II or higher liquids. Verify that service stations open to the public that store Class II and Class III liquids such as kerosene and fuel oil in aboveground tanks meet the following standards: - the tank's aggregate capacity does not exceed 560 gal - plans are approved prior to installation of the tank(s).

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
DIESEL ABOVEGROUND STORAGE TANKS	(NOTE: The regulations of this section apply to installations with aboveground diesel fuel storage tanks that are designed to supply commercial, industrial, governmental, manufacturing, or agricultural fuel dispensing systems that are not open to the public and that are intended only for the fueling of motor vehicles.)
17-11. Installations with diesel aboveground storage tanks must meet specific standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(m)1 through 3).	Determine if the installation has aboveground diesel fuel storage tanks designed to supply a commercial, industrial, governmental, manufacturing, or agricultural fuel dispensing system only for motor vehicles and not open to the public. Verify that the aboveground storage tanks comply with the applicable provisions of Chapters 2 and 3 of NFPA 30, Flammable and Combustible Liquids Code. Verify that diesel fuel storage tanks at an individual site do not exceed a maximum aggregate capacity of 12,000 gal. Verify that no backfill is permitted. Verify that tanks designed and built for underground use are not installed for aboveground use. Verify that tanks meet the following location standards: - 50 ft from the nearest important building on the same property - 50 ft from any fuel dispenser - 50 ft from the nearest side of any public way - 100 ft from any property line that is or may be built upon including the opposite side of any public way. (NOTE: Location standards may be reduced by 50 percent if the tanks are installed with a vault that complies with regulations.) Verify that spill control and overfill prevention is provided.
17-12. Installations with diesel aboveground storage tanks must meet specific vault standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(m)4).	Determine if the installation has aboveground diesel fuel storage tanks with vaults constructed either above or below grade. Verify that vaults meet the following construction standards: - walls, top, and floor constructed of at least 6 inch (in.) thick reinforced concrete - designed for the anticipated loading and anticipated soil and hydrostatic loading for vaults installed below grade - liquid tight - no backfill around the tank - meet good engineering practices - resistant to damage from the impact of a motor vehicle or have suitable collision barriers - vent pipes terminate at least 12 ft above ground level.

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-12. (continued)	Verify that vaults meet the following safety standards: - each tank has its own vault - each vault and tank is suitably anchored to withstand uplifting groundwater or flooding including when the tank is empty - adequate ventilation is provided to dilute, disperse and remove vapors - a water and flammable or combustible liquids detection system is provided with an alarm - provided with an approved means to admit a fire suppression agent into the vault. Verify that the vault has adequate means to recover liquid from the vault. Verify that each vault is provided with a means for personnel entry. Verify that each entry point is secured against unauthorized entry and vandalism and has a warning sign indicating the need for safe entry into confined spaces.
17-13. Installations with diesel aboveground storage tanks must meet piping and ancillary equipment standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(m)5).	Verify that each tank's liquid level can be determined and the gauge is easily accessible to the delivery operator. Verify that each tank either automatically stops the delivery of fuel when the liquid level reaches 95 percent of capacity or an alarm sounds when the liquid level reaches 90 percent of capacity. Verify that fuel is not dispensed from the tank by either gravity flow or pressurization of the tank. Verify that the tank is equipped to prevent the release of liquid by syphon flow. Verify that if the tank's elevation produces a gravity head on the dispensing device, the tank outlet is equipped with a device that prevents gravity flow from the tank to the dispenser including in the event of a piping or hose failure. Verify that if a submersible pump system is used, a listed emergency shut-off valve is installed at each dispensing device. Verify that if a suction pump-type dispensing device is used, a listed, vacuum-actuated shut-off valve, with a shear section, or an equivalent-type valve is installed directly beneath each dispensing device. Verify that shut-off and check valves are equipped with a pressure-relieving device that relieves the pressure generated by thermal expansion back to the tank. Verify that piping is routed so that exposure to physical damage is minimized.

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-14. Installations with diesel aboveground storage tanks must meet physical protection standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(m)6).	Verify that tanks not enclosed in a perimeter security fence are enclosed with a chain link fence that meets the following criteria: - at least 10 ft high - at least 10 ft away from the tanks - the gate is secured at all times. Verify that aboveground tanks are protected against vehicular collision by suitable barriers. Verify that the area within the fence and dike is kept free of vegetation, debris, and any other material that is not necessary to the proper operation of the tank and piping system. Verify that any portion of a tank or its piping system that is in contact with the soil is protected from corrosion in accordance with sound engineering practices.
17-15. Installations with diesel aboveground storage tanks must meet tank filling operation standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(2)(m)7).	Verify that the delivery vehicle is separated from any aboveground tank by at least 25 ft. Verify that a check valve, gate valve with quick-connect coupling, or a dry-break valve is installed in the piping at the point where connection and disconnection is made for delivery from the vehicle to any aboveground tank and is protected against tampering and physical damage. Verify that if the delivery hose is connected directly to the tank, the fill line at the tank is equipped with a tight-fill device for connecting the hose to the tank. Verify that approved measures are taken to prevent or contain any spill that may occur during delivery operations.
TRANSPORTATION OF FLAMMABLE AND COMBUSTIBLE LIQUIDS	
17-16. Installations with tank vehicles that transport flammable and combustible liquids must meet specific safety standards (RSFC, Chapter 120-3-11, Sections 120-3-11-.07(3)(a) through (d) and (f)).	Determine if the installation has tank vehicles that transport flammable and combustible liquids. Verify that vehicles are maintained in good operating conditions. Verify that persons driving, attending, making deliveries, filling, discharging or repairing vehicles are not under the influence of intoxicants, narcotics or other dangerous drugs. Verify that intoxicating beverages, narcotics and other dangerous drugs are not carried in or on tank vehicles.

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-16. (continued)	Verify that each vehicle has the following markings: - the name and address of the installation on the sides and rear - installation name in letters at least 4 in. high - address lettering as large as will fit.
17-17. Installations with tank vehicles that transport flammable and combustible liquids must meet delivery and transfer standards (RSFC, Chapter 120-3-11, Section 120-3-11-.07(3)(e)).	Verify that no Class I liquids are transferred from tank trucks to motor vehicle fuel tanks or other tanks or containers on any highway, road, street, or alley except in an emergency. (NOTE: These regulations do not prohibit machinery or vehicles used in road construction and maintenance, fire-fighting vehicles, equipment used by public authorities or the U.S. Armed Services, or fuel containers used for such vehicles and equipment.) Verify that except for fire fighting apparatus, all machinery and vehicle motors are shut down while refueling. (NOTE: Auxiliary motors involved with environmental control in cargo spaces may be kept running if necessary.) Verify that during flammable liquid off loading at public service stations, the area is posted and roped or barricaded as appropriate to limit access and prevent or control the source of ignition.
17-18. Installations that transport flammable and combustible liquids by other than tank vehicles must meet specific standards (RSFC, Chapter 120-3-11, Section 120-3-11-.08).	Determine if the installation transports flammable and combustible liquids by other than tank vehicles. Verify persons driving, attending, making deliveries, or otherwise handling flammable liquids while loading or unloading vehicles are not under the influence of intoxicants, narcotics or other dangerous drugs. Verify that intoxicants, narcotics or other dangerous drugs are not carried in or on vehicles transporting flammable or combustible liquids. Verify that only metal containers that meet ICC, DOT, or GPSC regulations are used. Verify that containers loaded in or on vehicles are securely fastened to prevent slipping and overturning. Verify that vehicles are in good operating conditions and are not overloaded. Verify that each vehicle is equipped with at least one 20-BC rated fire extinguisher, permanently mounted and readily accessible to the driver.

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-18. (continued)	Verify that drivers of vehicles are physically able to perform the job, carefully, capably, reliably, and are familiar with traffic laws and applicable regulations. Verify that no person smokes in vehicles when transporting Class I liquids unless the loaded containers are the original, unopened containers. Verify that vehicles transporting 1000 pounds (lb) gross weight or more of flammable liquids carry placards on the front, rear and sides that meet DOT requirements for text, color, and size.
LIQUEFIED PETROLEUM GASES	(NOTE: The state has adopted National Fire Protection Association (NFPA) Codes and Standards for the handling and storage of liquefied petroleum gases with the exception of the following modifications.)
17-19. Installations that store liquefied petroleum gas must be approved by the State Fire Marshal (RSFC, Chapter 120-3-16, Section 120-3-16-.04).	Verify that complete plans and specifications for all systems involving the storage of over 2000 water gallons of liquefied petroleum gas are submitted and approved by the State Fire Marshal before installation is started. Verify that systems that require a license but involve the storage of 2000 water gallons or less of liquefied petroleum gas have received a final inspection from the State Fire Marshal.
17-20. Installations that store and handle liquefied petroleum gases must meet specific container standards (RSFC, Chapter 120-3-16, Section 120-3-16-.07(2)(a) through (f), and (n)).	Verify that portable storage containers are located on a firm and level foundation with solid support and inflatable tires are not part of the support. Verify that all dealer-owned containers installed at the ultimate consumer's location are marked in a legible manner with the name of the installation and are in compliance with the American Society of Mechanical Engineers (ASME) data plate and certification standards. Verify that liquefied petroleum gas introduced into noncompliant containers have been approved by the State Fire Marshal. Verify that installations that introduce liquefied petroleum gas into containers used for storage or transportation of the gas for sale have a valid license for the location. Verify that ASME containers subject to internal pressure that requires welding to the shell, heads or part of the container meet the code under which the tank was fabricated. Verify that ASME tanks which have been involved in a fire and the protective coating has been burned off are repaired and retested for compliance with the code under which it was fabricated. (NOTE: Tanks are not required to be retested, if the protective coating is only soiled from smoke or debris and the container is still intact.)

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-20. (continued)	Verify that tanks permently removed from liquefied petroleum gas service are completely purged of any combustible mixture and the following is done: - DOT/ICC containers are tested or requalified with DOT regulations - ASME containers with a design working pressure of less than 250 pounds per square inch (psi) are not used, except for continued use at existing plants. Verify that systems or portions of systems that are red-tagged by the State Fire Marshal are only removed by the State Fire Marshal or an authorized representative. Verify that piping, tubing or regulators are rigidly fastened in their intended position.
17-21. Installations must meet specific use standards for liquefied petroleum gas (RSFC, Chapter 120-3-16, Section 120-3-16 -.07(2)(l)).	Verify that no liquefied petroleum gas is used as a source of pressure in operating spray guns and other equipment not specifically designed or intended to use liquefied petroleum gas.
17-22. Installations with bulk storage facilities, cylinder filling facilities and cylinder exchange staging areas must meet specific safety standards (RSFC, Chapter 120-3-16, Section 120-3-16-.07(2)(m)).	Verify that bulk storage facilities, cylinder filling facilities and cylinder exchange staging areas have emergency contact information posted in a prominent location accessible to persons who might notice leaks, fires or other unsafe conditions. Verify that bulk storage and cylinder filling facilities have letters at least 2 in. high using a 1/4 in. stroke. Verify that cylinder staging areas have letters at least 3/4 in. high and using approximately a 1/8 in. stroke. Verify that no smoking signs are conspicuously posted.
17-23. Installations with liquefied petroleum gas containers must meet specific valve standards (RSFC, Chapter 120-3-16, Section 120-3-16-.07(2)(o), (q), (r)).	Verify that except during transfer operations, the liquid cargo valve(s) of all cargo and tank trucks are closed by means of selfclosing shutoff valves. Verify that all containers used in industrial truck service including fork lift truck cylinders have the container pressure relief valve protected by a suitable pressure relief valve cover. Verify that all container pressure relief valves are inspected at regular intervals and replaced as necessary.

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REGULATORY REQUIREMENTS:	**REVIEWER CHECKS:**
17-24. Installations with personnel that handle LP gases must meet training standards (RSFC, Chapter 120-3-16, Section 120-3-16 -.07(2)(s)).	Verify that all persons that handle LP gases are trained in proper handling and operation procedures. Verify that personnel training documentation is maintained.
LIQUEFIED NATURAL GAS AND COMPRESSED NATURAL GAS	(NOTE: The state has adopted the following NFPA standards: # 52, 1988 and # 59A, 1990).
17-25. Installations with systems involving the storage of liquefied natural or compressed natural gas must be approved by the State Fire Marshal (RSFC, Chapter 120-3-17, Section 120-3-17-.03).	Determine if the installation is installing a system involving the storage of liquefied natural or compressed natural gas. Verify that the system received approval by the State Fire Marshal prior to installation. Verify that a copy of the approved plans are kept available at the construction site. Verify that installations that store and handle liquefied natural gas and suffer a fire or serious accident involving liquefied natural gas submits a written report to the State Fire Marshal as soon as possible but no later than 72 h.

INSTALLATION:	COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT Georgia Supplement	DATE:	REVIEWER(S):

STATUS NA C RMA	REVIEWER COMMENTS: